

ERNIE FLETCHER
GOVERNOR



LAJUANA S. WILCHER
SECRETARY

COMMONWEALTH OF KENTUCKY
ENVIRONMENTAL AND PUBLIC PROTECTION CABINET
OFFICE OF THE SECRETARY
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February 9, 2005

Mr. James I. Palmer, Jr.
Regional Administrator
U.S. EPA, Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303

Dear Mr. Palmer:

Enclosed for your consideration is a proposed amendment to the Commonwealth of Kentucky's State Implementation Plan (SIP). This amendment will revise the maintenance plan for the northern Kentucky counties of Boone, Campbell, and Kenton, which are part of the Cincinnati-Hamilton 1-hour ozone maintenance area.

Specifically, Kentucky wishes to remove the vehicle emissions testing program from the active part of the SIP control measures to the contingency measure portion of the SIP, effective March 31, 2005. Kentucky also requests to repeal Kentucky Administrative Regulation 401 KAR 63:010 "Vehicle Emission Control Programs" effective March 31, 2005.

Kentucky is proposing to incorporate into the SIP amended regulation 401 KAR 59:185, "New solvent metal cleaning equipment, and the new regulation 401 KAR 59:760, "Commercial motor vehicle and mobile equipment refinishing operations," which provide equivalent and contemporaneous emission reductions that replace the emission reductions documented to occur from the vehicle emissions testing program. This proposed SIP revision replaces the July 16, 2004, submittal. Kentucky requests the July submittal be withdrawn and that EPA approve this SIP revision.

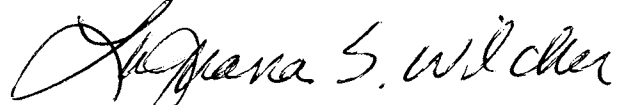
This proposed amendment was originally submitted to your office on November 12, 2004, and a public hearing to receive comments on this request was held at the Northern Kentucky Area Development District on January 4, 2005, at 6:00 pm. The division's response to comments received during the public comment period is included as Appendix G of this submittal.



Mr. James I. Palmer
February 9, 2005
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Five copies of the proposed revision are enclosed. Your prompt consideration of this request is appreciated. If you have any questions or comments concerning this matter, please contact Lona Brewer at (502) 573-3382.

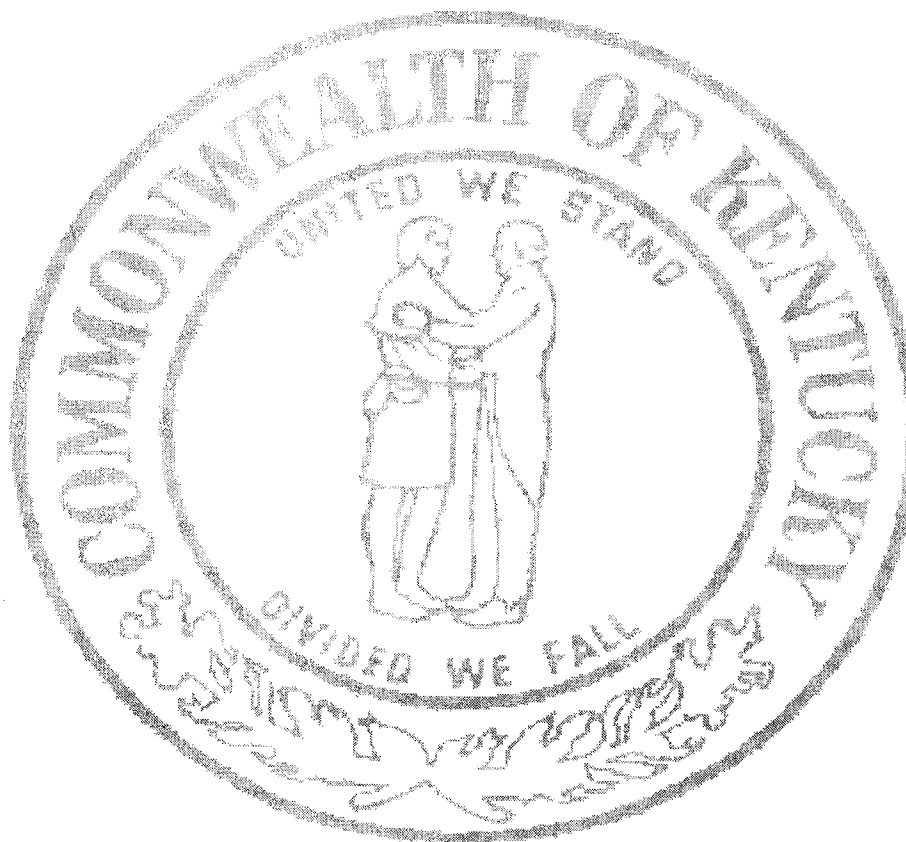
Sincerely,

A handwritten signature in cursive script, reading "LaJuana S. Wilcher". The signature is written in dark ink and is positioned above the printed name and title.

LaJuana S. Wilcher
Secretary

LSW:jeg
Enclosures
cc: Kay Prince

OZONE MAINTENANCE PLAN SIP REVISION FOR
THE KENTUCKY
COUNTIES OF BOONE, CAMPBELL, AND KENTON IN
THE CINCINNATI-HAMILTON
OZONE MAINTENANCE AREA



Prepared by the

KENTUCKY DIVISION FOR AIR QUALITY

Submitted by

KENTUCKY ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

February 2005

PROPOSED REVISION

NORTHERN KENTUCKY MAINTENANCE PLAN

In concert with the Kentucky Senate Joint Resolution 3 (*Appendix A*), which was signed by Governor Fletcher on April 9, 2004, Kentucky is submitting to the U.S. Environmental Protection Agency (EPA) this State Implementation Plan (SIP) revision to end the vehicle emissions testing program currently operating in the Kentucky portion of the Cincinnati-Hamilton 1-hour ozone maintenance area (i.e., Boone, Campbell, and Kenton Counties). This request to revise the SIP is based on providing equivalent and contemporaneous emission reductions in the maintenance area that replace the reductions achieved from the vehicle emissions testing program in Boone, Campbell, and Kenton Counties.

The following documentation provides to EPA, the SIP revision for the Kentucky portion of the Cincinnati-Hamilton County 1-hour ozone maintenance area. Specifically, Kentucky formally requests that the SIP be revised in order to:

1. Remove the vehicle emissions testing program requirement currently found in 401 KAR 65:010 "Vehicle Emission Control Programs" in the Kentucky portion of the Cincinnati-Hamilton ozone maintenance area from the active part of the SIP and move the testing program to the contingency measure portion of the SIP, effective March 31, 2005;
2. Repeal Kentucky Administrative Regulation 401 KAR 65:010 "Vehicle Emission Control Programs" effective March 31, 2005; and
3. Document and incorporate into the SIP, equivalent and contemporaneous emission reductions in the Kentucky portion of the Cincinnati-Hamilton ozone maintenance area that replace the reductions documented to occur from the vehicle emissions testing program.

ONROAD MOBILE SOURCE BUDGET EMISSIONS INCREASE WITH ENDING THE VEHICLE EMISSION TESTING PROGRAM IN NORTHERN KENTUCKY

As a result of ending the vehicle emissions testing program in Boone, Campbell, and Kenton Counties, the volatile organic compound (VOC) and oxides of nitrogen (NOx) emissions from onroad mobile sources were calculated to increase by the following amounts (expressed in tons per summer day - tpsd) using Mobile6.2. Mobile6.2 onroad mobile source emissions have

replaced the Mobile5ah generated emissions in the approved maintenance plan. Mobile6.2 is the latest version of the mobile model and its use is required by the U.S. EPA.

VET Onroad Mobile Emissions To Be Replaced with Equivalent and Contemporaneous Emission Reductions*

Strategy	2005 VOC Emissions (tpsd)**	2005 NOx Emissions (tpsd)**
With VET	8.98	24.21
Without VET	9.76	24.50
Result	-0.78	-0.29

Strategy	2008 VOC Emissions (tpsd)	2008 NOx Emissions (tpsd)
With VET	7.33	19.30
Without VET	7.90	19.32
Result	-0.57	-0.02

Strategy	2010 VOC Emissions (tpsd)	2010 NOx Emissions (tpsd)
With VET	7.02	17.33
Without VET	7.68	17.42
Result	-0.66	-0.09

*The Mobile 6.2 model was used to determine the VET onroad emission reductions that need to be replaced with equivalent and contemporaneous reductions.

**The 2005 emissions increase was utilized to determine the target emission reduction needed to be replaced since the 2005 emissions were the highest.

Determination of Equivalent and Contemporaneous Emission Reductions

Both VOC and NOx emissions slightly increase as a result of moving the northern Kentucky VET program to the contingency portion of the SIP. As indicated in the 2005 onroad

emissions table above, 0.78 tpsd of VOC and 0.29 of NOx emission increases must be replaced with equivalent and contemporaneous emission reductions.

VOC and NOx emissions are ozone precursors and existing EPA guidance allows for substitution of one pollutant for required reduction of the other pollutant. In the absence of photochemical grid modeling that would determine the equivalency of VOC and NOx reductions, EPA policy guidance allows for substitution on a percentage basis. Therefore, in this instance, a greater reduction in VOC emissions can be substituted for the NOx reductions. Appendix B provides the methodology for this equivalency determination.

The following table indicates the amount of emission increases as VOC that must be replaced with equivalent and contemporaneous emission reductions.

Emissions Increase From Ending NKY VET	2005 Increase w/2010 VOC/NOx Ratio (tpsd)
NOx Increase	0.29
NOx Increase Converted to VOC	0.15
VOC Increase	0.78
Total Emissions Increase as VOC to be Replaced	0.93

PERMANENT AND ENFORCEABLE EQUIVALENT AND CONTEMPORANEOUS EMISSION REDUCTIONS

Cold Cleaning Degreasing VOC Emission Reductions

The Division has adopted regulatory language that establishes a vapor pressure limit for the solvents used in cold cleaning degreasing operations in northern Kentucky (i.e., Boone, Campbell, and Kenton Counties) (*Appendix C*). The regulation requires that vendors provide to users in the affected counties only solvents with a vapor pressure at or below the level stipulated by the regulation for use in cold cleaning degreasers. Vendors also would be required to keep records of transactions with users and manufacturers. Users would be required to use only solvents with a vapor pressure at or below the level stipulated by the regulation and to keep records of their purchases of the solvents. The Division will also require users in the affected

counties to certify to the Division that they are complying by using the lower vapor solvents as stipulated by the regulation. As with similar cold cleaning degreasing regulations in Indiana, Illinois, and Maryland, the Division anticipates that the lower vapor pressure of cold cleaning solvents will reduce area source cold cleaning degreasing VOC emissions in the affected area by an estimated 67 percent. In addition, the Division has applied the EPA default of 80 percent rule effectiveness in determining the estimated cold cleaning emission reduction. Total VOC emissions reduction from this control will be 0.71 tpsd of VOC.

Cold Cleaning Degreasing VOC Emission Reductions			
County	Projected 2005 Cold Cleaning Degreasing Emissions (tpsd)	Estimated Cold Cleaning Degreasing Emission Reduction % / RE	2005 Cold Cleaning Degreasing Estimated Emission Reductions (tpsd)
Boone	0.32	67% / 80%	0.17
Campbell	0.36	67% / 80%	0.19
Kenton	0.66	67% / 80%	0.35
Total	1.34		0.71

Mobile Equipment Refinishing Emission Reductions

The Division intends to adopt regulatory language (401 KAR 59:760) that will establish a high transfer efficiency spray gun requirement for mobile equipment refinishing operations in northern Kentucky (i.e., Boone, Campbell, and Kenton Counties) (*Please see the proposed regulation in Appendix D*). 401 KAR 59:760 will result in VOC emission reductions that will, in conjunction with other measures, compensate for emission reductions lost from the removal of the VET program in northern Kentucky. An Emergency Administrative Regulation (*Please see the emergency regulation in Appendix D*) was filed with Kentucky's Legislative Research Commission with a compliance date of February 1, 2005, which will be in effect until the final adoption of 401 KAR 59:760. Kentucky Revised Statute 13A.190 provides that this emergency administrative regulation "shall expire one hundred seventy (170) days after the date of publication or when the same matter filed as an ordinary administrative regulation filed for

review is adopted, whichever occurs first.” An estimated effective date for 59:760 is March 31, 2005.

Based on the existing SIP for northern Kentucky, there are an estimated 0.96 tpsd of VOC emissions in 2005 for total mobile equipment refinishing emissions that are available for reduction. According to the Ozone Transport Commission (OTC) Pechan Report, dated March 31, 2001, an additional 35% reduction is a valid assumption through the implementation of high transfer efficiency spray gun technology that has been approved by EPA in several areas of the nation. In addition, the Division has applied EPA’s default 80 percent rule effectiveness in determining the estimated mobile equipment refinishing emission reduction. Therefore, total VOC emissions reduction from this control in northern Kentucky will be 0.27 tpsd of VOC.

Mobile Equipment Refinishing VOC Emission Reductions			
County	*Projected 2005 Mobile Equipment Refinishing Emissions (tpsd)	Estimated Mobile Equipment Refinishing Emission Reduction % / RE	2005 Mobile Equipment Refinishing Estimated Emission Reductions (tpsd)
Boone	0.27	35% / 80%	0.08
Campbell	0.26	35% / 80%	0.07
Kenton	0.43	35% / 80%	0.12
Total	0.96		0.27

*The projected 2005 mobile equipment refinishing emissions reflect a VOC emission reduction from the September 11, 1998, federal automotive refinish coatings rule per a 1994 EPA John Setiz memorandum (See Appendix E).

Additional Reductions - NOx SIP Call Reductions

Although not being used to compensate for removing the VET program, it is important to note ongoing declining emission trends. In May of 2004, Cincinnati Gas and Electric’s East Bend Station, which is located in Boone County, Kentucky, began complying with applicable provisions of the NOx SIP Call. Significant NOx emission reductions are occurring due to the 2002 installation of Selective Catalytic Reduction (SCR) technology installed for operation on Unit 2 during the ozone season (i.e., May-September). Any NOx emission reductions achieved from the NOx SIP call throughout the entire region and at the East Bend Station will only contribute to the area’s continued maintenance of the 1-hour ozone standard and future

compliance with the 8-hour ozone and fine particulate standards. In the East Bend Station's 2003 request for Early Reduction Credits (ERCs), information was submitted documenting reductions of 2,534 tons during the 2003 ozone season. These reductions will contribute to maintenance of the 1-hour standard and provide progress toward the area achieving the 8-hour ozone and fine particulate standards in the future.

**Emission Reductions Necessary
to Replace VET Program Emission Reductions**

Northern Kentucky Emissions	2005 VOC Emission Reductions (tpsd)	2005 NO_x Emission Reductions (tpsd)
Total 2005 Emissions Increase from Ending the VET program to be Replaced	0.78	0.29
Target VOC Emission Reductions to be Replaced after Converting NO _x to VOC*	0.93	0.00

*See Appendix B & E for conversion methodology.

**Equivalent & Contemporaneous Emission Reductions
to Replace VET Program**

Emission Reduction Programs	2005 VOC Emission Reductions (tpsd)
Cold Cleaning Degreasing Emission Reductions	0.71
Mobile Equipment Refinishing Emission Reductions	0.27
Total Reductions	0.98
2005 Emissions to be Replaced from Ending VET Program	0.93
Resulting Difference Beyond Required Emission Reductions	0.05

The information in the above table indicates that the revisions to the cold cleaning degreasing and mobile equipment refinishing requirements in the area will make up and slightly exceed the emission increases resulting from ending the VET program in the Kentucky portion of the Cincinnati-Hamilton 1-hour ozone maintenance area on March 31, 2005. Therefore, the Commonwealth of Kentucky hereby requests EPA to approve this SIP revision (*See Appendix E for supporting information regarding this SIP revision*).

The following table indicates the attainment year and the projected emissions through the year 2010. The mobile emissions provided in this table have been developed using Mobile6.2. In addition, the table shows the emission reductions that offset any emissions increase from ending the VET program in northern Kentucky.

**VOC Emissions in Tons Per Summer Day for KY Counties (Boone, Campbell and Kenton)
and Emission Changes**

Category	Current Emissions in Maintenance Plan*						Emissions After Maintenance Plan Revisions*					
	1996	1999	2002	2005	2008	2010	2005 Chg.	2005 With Chg.	2008 Chg.	2008 With Chg.	2010 Chg.	2010 With Chg.
Point	4.14	3.96	4.07	4.19	4.33	4.40	0.00	4.19	0.00	4.33	0.00	4.40
Area	13.57	10.27	10.45	10.76	11.13	11.35	-0.98	9.78	-1.01	10.12	-1.02	10.33
Mobile*	18.08	14.60	10.78	8.98	7.33	7.02	0.78	9.76	0.57	7.90	0.66	7.68
Non-Hwy	9.31	9.58	9.82	10.23	10.65	10.97	0.00	10.23	0.00	10.65	0.00	10.97
Total	45.10	38.41	35.12	34.16	33.44	33.74	-0.20	33.96	-0.44	33.00	-0.36	33.38

*Mobile6.2 onroad mobile source emissions have replaced the original maintenance plan's Mobile5ah onroad mobile emissions since the Mobile6.2 model was utilized to determine the emission reductions needed to be replaced.

**NOx Emissions in Tons Per Summer Day for KY Counties (Boone, Campbell and Kenton)
and Emission Changes**

Category	Current Emissions in Maintenance Plan*						Emissions After Maintenance Plan Revisions*					
	1996	1999	2002	2005	2008	2010	2005 Chg.	2005 With Chg.	2008 Chg.	2008 With Chg.	2010 Chg.	2010 With Chg.
Point	29.06	29.47	29.90	30.34	30.77	31.07	0.00	30.34	0.00	30.77	0.00	31.07
Area	0.51	0.33	0.34	0.34	0.35	0.37	0.00	0.34	0.00	0.35	0.00	0.37
Mobile*	32.49	32.15	28.02	24.21	19.30	17.33	0.29	24.50	0.02	19.32	0.09	17.42
Non-Hwy	12.07	12.87	13.27	13.95	14.69	15.20	0.00	13.95	0.00	14.69	0.00	15.20
Total	74.13	74.82	71.53	68.84	65.11	63.97	0.29	69.13	0.02	65.13	0.09	64.06

*Mobile6.2 onroad mobile source emissions have replaced the original maintenance plan's Mobile5ah onroad mobile emissions since the Mobile6.2 model was utilized to determine the emission reductions needed to be replaced.

*In the June 24, 2000, *Federal Register* the NOx area and non-highway Kentucky emissions were switched in error for 1996.

The overall VOC and NOx emissions remain well below the attainment year levels (1996) thus demonstrating continued maintenance of the 1-hour ozone standard. It is important to note that upon approval of this revision the mobile source emissions projections included in the tables above (2010 VOC = 7.68 tpsd, NOx = 17.42 tpsd) will be the sub-area budgets used to determine transportation conformity.

This area has historically met the CO NAAQS. As shown in the table below, the trend in the northern Kentucky area for the ten years previous to the last year of available CO monitoring data in 2001 shows a continual decline, with the lowest values occurring since 1998. With the most recent data showing that the CO monitoring data is 93% below the standard, an increase of 12.5 tons per summer day from closure of the VET program in 2005 will not interfere with continued attainment of the CO standard.

CO Values for NKY				
Year	1-Hr Max	%Below Standard	8-Hr Max	%Below Standard
1991	7.9	77%	4.9	46%
1992	6.8	81%	3.9	57%
1993	8.7	75%	4.5	50%
1994	5.8	83%	4.3	52%
1995	7.0	80%	4.1	54%
1996	5.3	85%	4.2	53%
1997	5.8	83%	3.3	63%
1998	3.9	89%	3.2	64%
1999	4.1	88%	2.5	72%
2000	4.1	88%	2.4	73%
2001	2.4	93%	1.8	80%

PUBLIC PARTICIPATION

A public hearing to receive comments on the SIP revision for the Kentucky portion of the Cincinnati-Hamilton County 1-hour ozone maintenance area was held on January 4, 2005, at the offices of the Northern Kentucky Area Development District. The public comment period ended at the close of the hearing. A copy of the public hearing notice is provided in Appendix F.

A copy of the Environmental and Public Protection Cabinet's response to comments received during the public review process is included in Appendix G.

APPENDICES

Appendix A

Senate Joint Resolution 3

Appendix B

NO_x to VOC Equivalency Methodology

Appendix C

401 KAR 59:185

Appendix D

401 KAR 59:760E, 401 KAR 59:760

Appendix E

**Supporting Information Regarding this
SIP Revision**

Appendix F

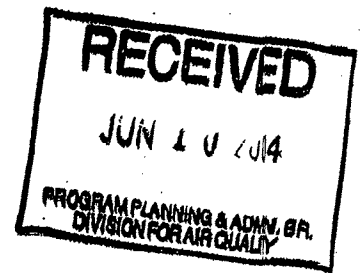
**Public Hearing Notice and
Documentation**

Appendix G

**Response to Comments Received During
Public Comment Period**

Appendix A

Senate Joint Resolution 3



GENERAL ASSEMBLY

COMMONWEALTH OF KENTUCKY

2004 REGULAR SESSION

SENATE JOINT RESOLUTION NO. 3
AS ENACTED

MONDAY, MARCH 29, 2004

A JOINT RESOLUTION relating to vehicle emissions control testing.

WHEREAS, in various areas of the Commonwealth vehicle emissions testing (VET) programs have operated since 1984; and

WHEREAS, since 1984, the regulation of pollutants has tightened and technological controls on a variety of air emission sources, including vehicles, have improved; and

WHEREAS, gasoline formulations have changed to reduce harmful components; and

WHEREAS, approximately 98% of vehicles tested pass the first time tested for emissions; and

WHEREAS, VET programs are seen by many citizens as an imposition, unnecessary, and ineffective to achieve the program's purpose; and

WHEREAS, federal law allows various approaches to attaining air quality; and

WHEREAS, KRS 224.20-715 provides that "The cabinet shall administer or provide for a comprehensive vehicle emission control program which may require the annual inspection of vehicles in counties designated by federal Environmental Protection Agency regulation to be nonattainment for ozone, carbon monoxide, or nitrogen dioxide if a program is necessary or prudent to meet federal air quality standards and if no federal Environmental Protection Agency approved program is being operated by an air pollution control district, county fiscal court, or combination of county fiscal courts"; and

WHEREAS, the Natural Resources and Environmental Protection Cabinet by administrative regulation 401 KAR 65:010 requires the establishment of VET programs in "Vehicle Emission Control Areas," which are defined in that administrative regulation as counties in which the entire county has been designated "moderate ozone nonattainment"; and

WHEREAS, the Natural Resources and Environmental Protection Cabinet's administrative regulation 401 KAR 65:010 also provides that the VET programs

established pursuant to the administrative regulation shall continue upon redesignation of the program areas to "attainment" for ozone; and

WHEREAS, the Natural Resources and Environmental Protection Cabinet's "Northern Kentucky Emissions Check" vehicle emissions testing program is currently operating in counties which are no longer designated "moderate ozone nonattainment"; and

WHEREAS, the Commonwealth's only other VET program operated in an area that is also no longer in nonattainment status and has been eliminated; and

WHEREAS, the Finance and Administration Cabinet has entered into a 10-year price contract, PCT NO.: BP010138, for emissions testing related to the Northern Kentucky Emissions Check program; and

WHEREAS, that contract provides for termination, with 90 days' notice, of the contract by either party at any time due to termination of the vehicle emission control program for any of the subject counties, or due to federal or legislative changes or court decisions, or for other reasons;

NOW, THEREFORE,

Be it resolved by the General Assembly of the Commonwealth of Kentucky:

1 Section 1. The Natural Resources and Environmental Protection Cabinet is
2 directed to submit to the United States Environmental Protection Agency a revision of the
3 State Implementation Plan for the 1-hour ozone standard that would remove the vehicle
4 emissions testing program provided for in 401 KAR 65:010 in the area served by the
5 Northern Kentucky Emissions Check testing program not later than August 1, 2004.

6 Section 2. It should be further stipulated that the Commonwealth of Kentucky will
7 determine the best methods to meet and exceed any Clean Air Act standards now and in
8 the future. Furthermore, the Commonwealth of Kentucky, and any and all cabinets so
9 charged with meeting such standards, will not permit nor allow punitive actions to be
10 taken against the Commonwealth's citizens, business, or lands so long as the

1 Commonwealth can show its methods to be improving the air quality to achieve or
2 exceed federal standards within a reasonable time frame.

3 Section 3. Upon approval of the State Implementation Plan revision, the Natural
4 Resources and Environmental Protection Cabinet and the Transportation Cabinet are
5 directed to take any and all measures necessary to ensure that no motor vehicle owner
6 whose vehicle is subject to testing by the Northern Kentucky Emissions Check testing
7 program is refused registration reinstatement, denied vehicle registration, or subjected to
8 registration revocation after cancellation of the program for failure to comply with
9 Northern Kentucky Emissions Check program requirements prior to its cancellation.

10 Section 4. In the event that the area served by the Northern Kentucky Emissions
11 Check testing program is redesignated as nonattainment under the 8-hour ozone or 2.5
12 fine particulate standards, the Natural Resources and Environmental Protection Cabinet is
13 directed to formulate a State Implementation Plan for these standards that does not rely
14 upon a vehicle emissions testing program, unless the same is required by law or necessary
15 for the approval of the State Implementation Plan. The final decision in this regard
16 remains with the Secretary of the Natural Resources and Environmental Protection
17 Cabinet.

18 Section 5. The Natural Resources and Environmental Protection Cabinet is
19 directed to provide technical assistance, if requested, to the Louisville Metro Air
20 Pollution Control District to find compensating reductions in emissions by the United
21 States Environmental Protection Agency, so that the State Implementation Plan for these
22 standards does not rely upon a vehicle emissions testing program, unless the same is
23 required by law or necessary for the approval of the State Implementation Plan.

Appendix B

NO_x to VOC Equivalency Methodology

NOx to VOC Equivalency Methodology

In accordance with guidance from and discussions with EPA Region 4, the following equation was utilized to determine the equivalent amount of VOC to substitute for the NOx emissions increase in the Kentucky portion of the Cincinnati-Hamilton 1-hour ozone maintenance area. This equation incorporates the calculation of the VOC/NOx ratio, which, for a given year, is the total VOC emissions divided by the total NOx emissions from all source categories in the area.

$$\text{2005 Equivalent VOC Emission Reduction} = \frac{\text{Total VOC Emissions}}{\text{Total NOx Emissions}} \times \text{2005 NOx Emissions Increase}$$

$$\text{2005 Equivalent VOC Emission Reduction} = 0.15 = \frac{34.05^*}{63.77} \times 0.29$$

*The 2010 VOC/NOx ratio was utilized since it provided the higher equivalent emissions before rounding.

The following table provides the existing emissions approved in the northern Kentucky SIP that were used to calculate the VOC/NOx ratio and the equivalent NOx to VOC emissions.

Kentucky Portion of the Cincinnati-Hamilton 1- Hour Ozone Maintenance Area –

Total Emissions (expressed in tons per summer day (tpsd))

	2005 (tpsd)	2008 (tpsd)	2010* (tpsd)
Total Ky VOC Emissions	32.56	32.58	34.05
2005 Onroad Mobile NOx Emissions Increase	0.29	0.29	0.29
Total Ky NO _x Emissions	64.77	62.80	63.77
VOC/NOx Ratio = $\frac{\text{Total VOC Emissions}}{\text{Total NOx Emissions}}$ (Rounded to two decimals)	0.50	0.52	0.53
NOx to VOC Equivalent Emissions as VOC	0.1450	0.1508	0.1537
NOx to VOC Equivalent Emissions as VOC (Rounded to two decimals)	0.15	0.15	0.15

*The 2010 VOC/NOx ratio was utilized since it provided the higher equivalent emissions before rounding.

Appendix C

**401 KAR 59:185 –Amended to
Require Lower Vapor Pressure Cold
Cleaning Degreasing Solvents to be
Sold and Used in Boone, Campbell
and Kenton Counties**

**Submitted to EPA on July 16, 2004,
and a public hearing was conducted on
SIP submittal on August 25, 2004**

401 KAR 59:185. New solvent metal cleaning equipment.

RELATES TO: KRS 224.20-100, 224.20-110(1), 224.20-120, 42 U.S.C. 7408, 7410

STATUTORY AUTHORITY: KRS 224.10-100.

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the Environmental and Public Protection Cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. 42 U.S.C. 7410 likewise requires the state to implement standards for national primary and secondary ambient air quality. This administrative regulation provides for the control of volatile organic compound emissions from new solvent metal cleaning equipment.

Section 1. Definitions. (1) "Affected facility" means cold cleaners, open top vapor degreasers, and conveyORIZED degreasers that utilize volatile organic compounds (VOCs) to remove soluble impurities from metal surfaces.

(2) "Classification date" means June 29, 1979.

(3) "Cold cleaner" means a batch-loaded degreaser whose solvent is kept below its boiling point.

(4) "ConveyORIZED degreaser" means a degreaser that is continuously loaded by means of a conveyor system. Its solvent may be boiling or nonboiling.

(5) "Freeboard height" means:

(a) For a cold cleaner, the distance from the liquid solvent level in the degreaser tank to the lip of the tank; or

(b) For a vapor degreaser, the distance from the solvent vapor level in the tank to the lip of the tank.

(6) "Freeboard ratio" means the freeboard height divided by the width of the degreaser.

(7) "Open top vapor degreaser" means a batch-loaded degreaser whose solvent is heated to its boiling point creating a solvent vapor zone.

(8) "Refrigerated chiller" means a second set of freeboard condenser coils located slightly above the primary condenser coils that create a cold air blanket above the vapor zone.

(9) "Solvent" means, in this administrative regulation, VOCs.

Section 2. Applicability. (1) This administrative regulation, except for Section 4(3) and (4) shall apply to:

(a) Each affected facility commenced on or after the classification date defined in Section 1 of this administrative regulation and located in a county or portion of a county designated as nonattainment for ozone in 401 KAR 51:010, for any classification except marginal; and

(b) Each affected facility commenced on or after the effective date of this administrative regulation that is part of a major source located in a county or portion of a county designated attainment or marginal nonattainment for ozone in 401 KAR 51:010.

(2) Each affected facility commenced on or after the classification date defined in Section 1 of this administrative regulation but prior to the effective date of this administrative regulation that is part of a major source located in a county or portion of a county designated attainment or marginally nonattainment for ozone in 401 KAR 51:010 shall be exempt from this administrative regulation except that control devices and procedures required at the time it commenced shall continue to be operated and maintained.

(3) This administrative regulation, including Section 4(3) and (4), shall apply to each affected facility commenced on or after the classification date defined in Section 1 of this administrative regulation and located in Boone, Campbell, or Kenton counties.

Section 3. Standard for VOCs. The owner or operator of an affected facility to which this administrative regulation applies shall install, maintain and operate the control equipment and observe at all times the operating requirements that apply to this type of degreaser as specified in Sections 4, 5, and 6 of this administrative regulation.

Section 4. Cold Cleaners. (1) Control equipment.

(a) The cleaner shall be equipped with a cover. If the solvent volatility is greater than fifteen (15) mm Hg measured at 100° F or if the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with one (1) hand.

(b) The cleaner shall be equipped with a drainage facility so that solvent that drains off parts removed from the cleaner will return to the cleaner. If the solvent volatility is greater than thirty-two (32) mm Hg measured at 100° F then the drainage facility shall be internal so that parts are enclosed under the cover while draining. The drainage facility may be external if the cabinet determines that an internal type cannot fit into the cleaning system.

(c) A permanent, conspicuous label, summarizing the operating requirements specified in subsection (2) of this section shall be installed on or near the cleaner.

(d) If used, the solvent spray shall be a fluid stream, not a fine, atomized or shower type spray, and at a pressure that does not cause excessive splashing.

(e) If the solvent volatility is greater than thirty-two (32) mm Hg measured at 100° F or if the solvent is heated above 120° F, then one (1) of the following control devices shall be used:

1. Freeboard height that gives a freeboard ratio greater than or equal to seven-tenths (0.7);

2. Water cover, solvent shall be insoluble in and heavier than water; or

3. Other systems of equivalent control, such as a refrigerated chiller or carbon adsorption.

(2) Operating requirements.

(a) Waste solvent shall not be disposed of or transferred to another party so that greater than twenty (20) percent by weight of the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in covered containers.

(b) The degreaser cover shall be closed if not handling parts in the cleaner.

(c) Cleaned parts shall be drained for a minimum of fifteen (15) seconds, or until dripping ceases, whichever is longer.

(d) The flushing of parts with a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. The solvent flow shall be directed downward to avoid turbulence at the air-solvent interface so as to prevent the solvent from splashing outside of the cold cleaner.

(e) Work area fans shall be positioned so that air is not directed across the opening of the cold cleaner.

(f) The use of an air-agitated solvent bath is prohibited. A pump-agitated solvent bath shall be operated so as to produce no observable splashing of the solvent against either the tank wall or the parts that are being cleaned.

(g) The cold cleaner shall be free of all liquid leaks. Auxiliary cleaning equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible leaks, tears, or cracks.

(h) Spills that occur during solvent transfer shall be cleaned immediately. Wipe rags, or other absorbent equipment and materials, used to clean the spill shall be stored in a covered container for disposal unless storage of these items is prohibited by fire protection authorities.

(3) Restrictions regarding sale and use of solvents. Sixty (60) days after the effective date of this administrative regulation, the following activities are prohibited:

(a) The sale of any solvent with a vapor pressure that exceeds one (1.0) mm Hg (0.019 psi) measured at 20° C (68° F) in units greater than five (5) gallons for use in cold cleaners.

(b) The operation of a cold cleaner using a solvent with a vapor pressure that exceeds one (1.0) mm Hg (0.019 psi) measured at 20° C (68° F).

(4) Recordkeeping requirements.

(a) Any individual or entity subject to the provisions of Section 4(3)(a) of this administrative regulation shall maintain records for a minimum of five (5) years that include the following information for each solvent sale:

1. The name and address of the solvent purchaser;

2. The date of the sale;

3. The type of solvent;

4. The unit volume of the solvent;

5. The total volume of the solvent; and

6. The vapor pressure of the solvent measured in mm Hg at 20° C (68° F).

(b) Any individual or entity subject to the provisions of Section 4(3)(b) of this administrative regulation shall maintain records for a minimum of five (5) years that include the following information for each solvent purchase:

1. The name and address of the solvent supplier;
2. The date of the purchase;
3. The type of solvent; and
4. The vapor pressure of the solvent measured in mm Hg at 20° C (68° F).

Section 5. Open Top Vapor Degreasers. (1) Control equipment:

(a) The degreaser shall be equipped with a cover that can be opened and closed easily without disturbing the vapor zone.

(b) The degreaser shall be equipped with the following safety switches:

- 1.a. Condenser flow switch and thermostat to shut off sump heat if condenser coolant either is not circulating or is too warm;
- b. Spray safety switch to shut off spray pump if the vapor level drops more than four (4) inches below the bottom condenser coil in order to prevent spraying above the vapor level; and
- c. Vapor level control thermostat that shuts off sump heat if the vapor zone rises above the design level; or

2. Equivalent safety systems as approved on a case-by-case basis by the cabinet.

(c) The degreaser shall be equipped with at least one (1) of the following major control devices:

1. If the freeboard ratio is greater than or equal to 0.75, and if the degreaser opening is greater than ten (10) square feet, the cover shall be powered or mechanically assisted.
2. Refrigerated chiller.
3. Enclosed design so that the cover or door opens only if the dry part is actually entering or exiting the degreaser.
4. Carbon adsorption system, with ventilation greater than or equal to fifty (50) cfm/square foot of air-vapor interface area, if cover is open and exhausting less than twenty-five (25) ppm by volume solvent averaged over one (1) complete adsorption cycle.
5. Control system demonstrated to have control efficiency equivalent to or better than any of the above.

(d) A permanent, conspicuous label, summarizing the operating procedures specified in subsection (2) of this section shall be installed on or near the degreaser.

(2) Operating requirements:

(a) The cover shall be closed at all times unless processing work loads through the degreaser.

(b) Solvent carryout shall be minimized by the following measures:

1. Parts shall be racked so that entrainment of solvent is avoided and full drainage is accomplished.
2. Parts shall be moved in and out of the degreaser at a vertical speed less than eleven (11) ft./min.
3. Work load in the vapor zone shall be degreased until condensation ceases.
4. Any pools of solvent shall be tipped out on the cleaned parts before removal.
5. Parts shall be allowed to dry within the degreaser above the vapor zone until visually dry (fifteen.

(c) Porous or absorbent materials such as cloth, leather, wood, or rope shall not be degreased.

- (d) Work loads shall not occupy more than half of the degreaser's open top area.
- (e) Spray above the vapor level shall not be allowed.
- (f) Solvent leaks shall be repaired immediately or the degreaser shall be shut down.
- (g) Waste solvent shall not be disposed of or transferred to another party so that greater than twenty (20) percent by weight of the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in closed containers.
- (h) Exhaust ventilation shall not exceed sixty-five (65) cfm per square foot of degreaser area unless necessary to meet OSHA requirements or control device requirements. Ventilation fans shall not be used near the degreaser opening.
- (i) Water shall not be visually detectable in the solvent exiting the water separator.

Section 6. Conveyorized Degreasers. (1) Control equipment:

- (a) A conveyorized degreaser shall be enclosed except for work load entrances and exits.
- (b) The degreaser shall be equipped with a drying tunnel or another means such as rotating baskets sufficient to prevent cleaned parts from carrying out solvent liquid or vapor.
- (c) Minimized openings: entrances and exits shall silhouette work loads so that the average clearance between the largest parts and the edge of the degreaser opening is either less than four (4) inches or less than ten (10) percent of the width of the opening.
- (d) Downtime covers: the degreaser shall be equipped with covers for closing off the entrance and exit during shutdown hours.
- (e) If the degreaser has an air-solvent interface area or an air-vapor interface area equal to or greater than twenty (20) square feet, it shall be equipped with at least one (1) of the following major control devices:

1. Refrigerated chiller;

2. Carbon adsorption system with ventilation greater than or equal to fifty (50) cfm/square foot of air-vapor interface area, if downtime covers are open, and exhausting less than twenty-five (25) ppm of solvent by volume averaged over a complete adsorption cycle; or

3. A system demonstrated to have a control efficiency equivalent to or better than either of the above.

(f) If the degreaser is a vapor type, it shall be equipped with the following safety switches:

1.a. A condenser flow switch and thermostat that will shut off the sump heat if coolant is either not circulating or is too warm;

b. A spray safety switch that will shut off the spray pump or conveyor if the vapor level drops more than four (4) inches below the bottom condenser coil in order to prevent spraying above the vapor level; and

c. Vapor level control thermostat that will shut off sump heat if the vapor level rises above the design level; or

2. Equivalent safety systems as approved on a case-by-case basis by the cabinet.

(g) A permanent, conspicuous label, summarizing the operating procedures specified in subsection (2) of this section shall be installed on or near the degreaser.

(2) Operating requirements:

(a) Exhaust ventilation shall not exceed sixty-five (65) cfm per square foot of degreaser opening unless necessary to meet OSHA requirements or control device requirements. Work place fans shall not be used near the degreaser opening.

(b) Solvent carryout shall be minimized by the following measures:

1. Parts shall be racked so that entrainment of solvent is avoided and full drainage is accomplished.

2. Vertical conveyor speed shall be maintained at less than eleven (11) ft/min.

(c) Waste solvent shall not be disposed of or transferred to another party so that greater than twenty (20) percent by weight of the waste solvent can evaporate into the atmosphere. Waste solvent shall be stored only in closed containers.

(d) Solvent leaks shall be repaired immediately or the degreaser shut down.

(e) Water shall not be visually detectable in the solvent exiting the water separator.

(f) Downtime covers shall be placed over entrances and exits of the degreaser immediately after the conveyor and exhaust are shut down and removed just before they are started up.

Section 7. Compliance Timetable. (1) Affected facilities that were subject to this administrative regulation as in effect on June 29, 1979, shall have achieved final compliance upon start-up.

(2) The owner or operator of an affected facility that, on or after the effective date of this administrative regulation, becomes subject to this administrative regulation for any reason other than construction, modification, or reconstruction shall be required to complete the following:

(a) A final control plan for achieving compliance with this administrative regulation shall be submitted no later than three (3) months after the date the affected facility becomes subject to this administrative regulation.

(b) The control system contract shall be awarded no later than five (5) months after the date the affected facility becomes subject to this administrative regulation.

(c) On-site construction or installation of emission control equipment shall be initiated no later than seven (7) months after the date the affected facility becomes subject to this administrative regulation.

(d) On-site construction or installation of emission control equipment shall be completed no later than eleven (11) months after the date the affected facility becomes subject to this administrative regulation.

(e) Final compliance shall be achieved no later than twelve (12) months after the date the affected facility becomes subject to this administrative regulation.

(f) If an affected facility becomes subject to this administrative regulation because it is located in a county previously designated nonattainment or redesignated in 401 KAR 51:010 after June 15, 2004, final compliance may be extended to December 15, 2007, and the schedule in paragraphs (a) through (d) of this subsection adjusted by the cabinet.

Section 8. Exemptions. Any cold cleaners, other than cold cleaners subject to Section 4(3) or (4) of this administrative regulation, shall be exempt from Section 4 of this administrative regulation if the following criteria are met:

(1) The cold cleaner shall have a remote solvent reservoir;

(2) The solvent used in the cold cleaner shall not have a vapor pressure that exceeds thirty-three (33) mm Hg measured at 100° F or be heated above 120° F;

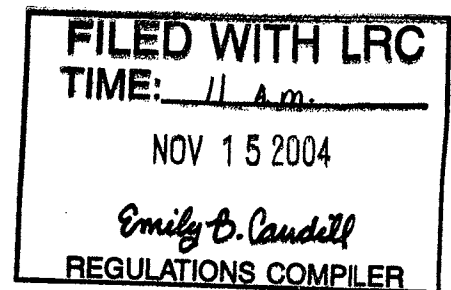
(3) The sink-like work area shall have an open drain area less than 100 sq. cm.; and

(4) Evidence shall be provided that waste solvent shall be stored or properly disposed of with minimal loss due to evaporation. (5 Ky.R. 455; Am. 6 Ky.R. 18; eff. 6-29-79; 7 Ky.R. 328; eff. 1-7-81; 18 Ky.R. 2616; 2936; 3340; eff. 6-24-92; 31 Ky.R. 403; 1142; eff. 1-4-2005.)

Appendix D

**401 KAR 59:760E Commercial Motor
Vehicle and Mobile Equipment
Refinishing Operations**

**401 KAR 59:760 Commercial Motor
Vehicle and Mobile Equipment
Refinishing Operations**



STATEMENT OF EMERGENCY
401 KAR 59:760E

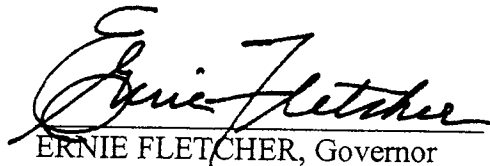
(1) Nature of the emergency.

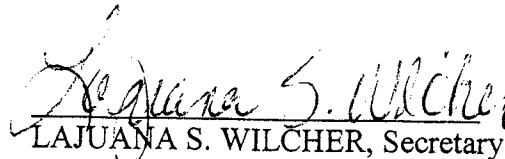
This emergency administrative regulation is being promulgated to revise the maintenance plan for Boone, Campbell, and Kenton Counties in Northern Kentucky. The maintenance plan for that area is part of the State Implementation Plan for the Commonwealth of Kentucky. The requirement for commercial motor vehicle and mobile equipment refinishing operations to use high efficiency transfer application techniques will reduce the release of volatile organic compounds into the ambient air. This requirement only applies to Boone, Kenton, and Campbell counties. This action is in response to Senate Joint Resolution 3 (SJR3). SJR3 directed the Environmental and Public Protection Cabinet (EPPC) to submit to the U. S. Environmental Protection Agency (U.S. EPA) a revision of the State Implementation Plan for the 1-hour ozone standard that would remove the vehicle emissions testing program provided for in 401 KAR 65:010.

(2) The reasons an ordinary administrative regulation is not sufficient.

This emergency administrative regulation will establish a compliance time to provide the emissions reductions necessary to eliminate the vehicle emissions testing program. Without the emergency administrative regulation, the effective date and compliance date of an ordinary regulation will not allow U.S. EPA sufficient time to approve the removal of the vehicle emissions testing program.

(3) This emergency administrative regulation shall be replaced by an ordinary administrative regulation. The ordinary administrative regulation was filed with the Regulations Compiler on November 15, 2004.


ERNIE FLETCHER, Governor


LAJUANA S. WILCHER, Secretary

1 ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

2 Department for Environmental Protection

3 Division for Air Quality

4 (New Emergency Administrative Regulation)

5 401 KAR 59:760E. Commercial Motor Vehicle and Mobile Equipment Refinishing
6 Operations.

7 RELATES TO: KRS 224.20-100, 224.20-110(1), 224.20-120, 42 U.S.C. 7408,
8 7410

9 STATUTORY AUTHORITY: KRS 224.10-100

10 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the
11 Environmental and Public Protection Cabinet to promulgate administrative regulations
12 for the prevention, abatement, and control of air pollution. 42 U.S.C. 7410 likewise
13 requires Kentucky to implement standards for national primary and secondary ambient
14 air quality. This administrative regulation provides for the control of volatile organic
15 compound emissions from new and existing commercial motor vehicle and mobile
16 equipment refinishing operations in Boone, Campbell, and Kenton Counties.

17 Section 1. Definitions.

18 (1) "Commercial motor vehicle and mobile equipment refinishing operation"
19 means any company or individual, other than the original manufacturer, that applies a
20 coating containing a volatile organic compound (VOC) as a pre-treatment, primer,
21 sealant, basecoat, clear coat, or topcoat to mobile equipment for commercial purposes.

1 (2) "High volume, low pressure (HVLP) sprayer" means an air atomized sprayer
2 that operates at a maximum of ten pounds per square inch gauge (psig) as measured at
3 the nozzle.

4 (3) "Mobile equipment" means any equipment that may be drawn or is capable of
5 being driven on a roadway, including automobiles, trucks, truck bodies, truck trailers,
6 cargo vaults, utility bodies, camper shells, construction equipment, farming equipment,
7 and motorcycles.

8 Section 2. Applicability.

9 This regulation shall apply to all commercial motor vehicle and mobile equipment
10 refinishing operations in Boone, Campbell, and Kenton Counties.

11 Section 3. Operating requirements.

12 On and after February 1, 2005, a person at a facility subject to this administrative
13 regulation shall:

14 (1) Use one or more of the following application techniques to apply any finish to
15 mobile equipment:

16 (a) Flow or curtain coating;

17 (b) Dip coating;

18 (c) Roller coating;

19 (d) Brush coating;

20 (e) Cotton-tipped swab application;

21 (f) Electrodeposition coating;

22 (g) High volume, low pressure (HVLP) spraying;

23 (h) Electrostatic spray;

1 (i) Air-assisted airless spray; and

2 (j) Other coating application method that the person demonstrates and the
3 cabinet determines achieves emissions reductions equivalent to HVLP or electrostatic
4 spray application methods.

5 (2) Be properly trained in the use of an HVLP sprayer, or equivalent application,
6 and the handling of a regulated coating and any solvents used to clean the sprayer.

7 (3) Store the following materials in nonabsorbent, non-leaking containers and
8 keep these containers closed at all times when not in use:

9 (a) Fresh coatings;

10 (b) Used coatings;

11 (c) Solvents;

12 (d) VOC-containing additives and materials;

13 (e) VOC-containing waste materials;

14 (f) Cloth, paper, or absorbent applicators moistened with any of the items listed in
15 this subsection.

16 Section 4. Exemptions.

17 The following coating applications are exempt from the requirements of Section 3
18 of this regulation:

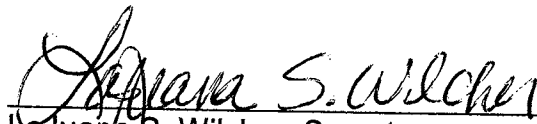
19 (1) The application of a coating through the use of an airbrush method for
20 stenciling, lettering, and other identification marking;

21 (2) The application of a coating sold in non-refillable aerosol container;

22 (3) The application of automotive touch-up repair and refinishing materials.

23 Section 5. Reporting requirements.

1 Before February 28, 2005, sources subject to the provisions of this regulation
2 shall submit documentation sufficient to substantiate that high efficiency transfer
3 application techniques of coatings are in use at their facility. The documentation shall
4 also verify that all employees applying coatings are properly trained in the use of an
5 HVLP sprayer, or equivalent application, and the handling of a regulated coating and
6 any solvents used to clean the sprayer. This documentation shall be sent to the
7 Kentucky Division for Air Quality, 803 Schenkel Lane, Frankfort, KY 40601, Attn:
8 Regulation Development Section.


Lajuana S. Wilcher, Secretary
Environmental and Public Protection Cabinet

11/12/04
Date

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Administrative Regulation #: 401 KAR 59:760

Contact person: Carl Millanti

(1) Provide a brief summary of:

(a) What this administrative regulation does:

This administrative regulation requires the use of high transfer efficiency application techniques at auto body repair and refinishing operations, and the proposed administrative regulation prescribes operating procedures to minimize the emissions of volatile organic compounds (VOC).

(b) The necessity of this administrative regulation:

The Environmental and Public Protection Cabinet is mandated to adopt and enforce administrative regulations that protect human health and the environment. The U.S. EPA has also required Kentucky to reduce VOC emissions in those areas of the state that are classified as nonattainment for ozone. This administrative regulation will provide for additional VOC reductions from auto body repair and refinishing operations.

(c) How this administrative regulation conforms to the content of the authorizing statutes:

KRS 224.10-100 requires the cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation will reduce VOC emissions by requiring high efficiency transfer application techniques at automobile body shops and prescribing proper handling procedures for VOC-containing materials at these facilities.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes:

This administrative regulation will reduce VOC emissions as required by KRS 224.10-100.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation:

This is not an amendment to an existing regulation. This is a new regulation.

(b) The necessity of the amendment to this administrative regulation:

This is not an amendment to an existing regulation. This is a new regulation.

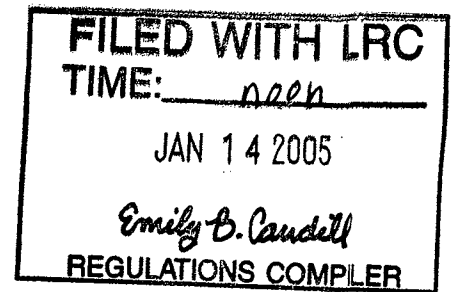
(c) How the amendment conforms to the content of the authorizing statutes:

This is not an amendment to an existing regulation. This is a new regulation.

(d) How the amendment will assist in the effective administration of statutes:

This is not an amendment to an existing regulation. This is a new regulation.

- (3) **List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation.**
The Environmental and Public Protection Cabinet has identified approximately 70 businesses that will be affected by this administrative regulation. No government entities will be affected.
- (4) **Provide an assessment of how the above group or groups will be impacted by either the implementation of this administrative regulation, if new, or by the change if it is an amendment:**
Businesses subject to this administrative regulation will be required to use high transfer efficiency application techniques and to follow prescribed procedures for handling VOC-containing materials. Those that must purchase new spray guns will quickly recoup their investment by reducing material consumption by as much as 60%.
- (5) **Provide an estimate of how much it will cost to implement this administrative regulation:**
(a) **Initially:**
The cabinet will not incur any additional costs to implement this administrative regulation.
(b) **On a continuing basis:**
There will not be any continuing costs associated with the implementation of this administrative regulation.
- (6) **What is the source of the funding to be used for the implementation and enforcement of this administrative regulation:**
The cabinet's operating budget will continue to be used to implement and enforce the administrative regulation.
- (7) **Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment.**
No increase in fees or funding is necessary to implement the proposed administrative regulation.
- (8) **State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees.**
The administrative regulation will not establish any fees, nor will it directly or indirectly increase any fees.
- (9) **TIERING: Is tiering applied? (Explain why tiering was or was not used.)**
No. Tiering would reduce the expected environmental benefits of this administrative regulation.



1 ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

2 Department for Environmental Protection

3 Division for Air Quality

4 (Amended After Comments)

5 401 KAR 59:760. Commercial Motor Vehicle and Mobile Equipment Refinishing
6 Operations.

7 RELATES TO: KRS 224.20-100, 224.20-110(1), 224.20-120, 42 U.S.C. 7408,
8 7410

9 STATUTORY AUTHORITY: KRS 224.10-100

10 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100 requires the
11 Environmental and Public Protection Cabinet to promulgate administrative regulations
12 for the prevention, abatement, and control of air pollution. 42 U.S.C. 7410 likewise
13 requires Kentucky to implement standards for national primary and secondary ambient
14 air quality. This administrative regulation provides for the control of volatile organic
15 compound emissions from new and existing commercial motor vehicle and mobile
16 equipment refinishing operations in Boone, Campbell, and Kenton Counties.

17 Section 1. Definitions.

18 (1) "Commercial motor vehicle and mobile equipment refinishing operation"
19 means any company or individual, other than the original manufacturer, that applies a

1 coating containing a volatile organic compound (VOC) as a pre-treatment, primer,
2 sealant, basecoat, clear coat, or topcoat to mobile equipment for commercial purposes.

3 (2) "High volume, low pressure (HVLP) sprayer" means an air atomized sprayer
4 that operates at a maximum air pressure of ten pounds per square inch gauge (psig)
5 as measured at the nozzle.

6 (3) "Mobile equipment" means any equipment that may be drawn or is capable of
7 being driven on a roadway, including automobiles, trucks, truck bodies, truck trailers,
8 cargo vaults, utility bodies, camper shells, construction equipment, farming equipment,
9 and motorcycles.

10 Section 2. Applicability.

11 This regulation shall apply to all commercial motor vehicle and mobile equipment
12 refinishing operations in Boone, Campbell, and Kenton Counties.

13 Section 3. Operating requirements.

14 On and after February 1, 2005, a person at a facility subject to this administrative
15 regulation shall:

16 (1) Use one or more of the following application techniques, in accordance with
17 manufacturer's specifications, to apply any coating containing a VOC as a pre-
18 treatment, primer, sealant, basecoat, clear coat, or topcoat to mobile equipment
19 for commercial purposes [~~finish to mobile equipment~~]:

20 (a) Flow or curtain coating;

21 (b) Dip coating;

22 (c) Roller coating;

23 (d) Brush coating;

(e) Cotton-tipped swab application;

(f) Electrodeposition coating;

(g) High volume, low pressure (HVLP) spraying;

(h) Electrostatic spray;

(i) Airless spray;

(j) [(i)] Air-assisted airless spray; and

(k) Any other [(j) Other] coating application method that the applicable facility [person] demonstrates [and the cabinet determines] achieves emissions reductions equivalent to HVLP or electrostatic spray application methods. This demonstration shall be submitted to and approved by the cabinet. The cabinet shall:

1. Hold a public hearing on the demonstration; and

2. Submit the determination to the U.S. EPA for approval.

(2) Be properly trained in the use of an HVLP sprayer, or equivalent application, **in accordance with manufacturer's specifications,** and the handling of a regulated coating and any solvents used to clean the sprayer.

(3) Store the following materials in nonabsorbent, non-leaking containers and keep these containers closed at all times when not in use:

(a) Fresh coatings;

(b) Used coatings;

(c) Solvents;

(d) VOC-containing additives and materials;

(e) VOC-containing waste materials;

(f) Cloth, paper, or absorbent applicators moistened with any of the items listed in this subsection.

Section 4. Exemptions.

The following coating applications are exempt from the requirements of Section 3 of this regulation:

(1) The application of a coating for graphic designs, stenciling, lettering or other identification marking through the use of an air brush method; ~~[through the use of an airbrush method for stenciling, lettering, and other identification marking;]~~

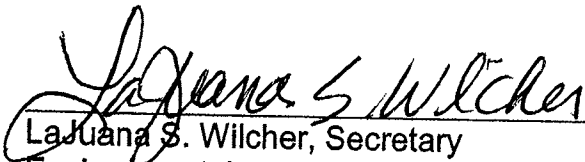
(2) The application of a coating sold in non-refillable aerosol container;

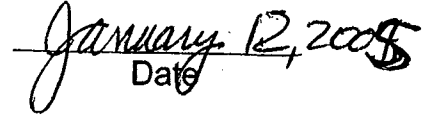
(3) The application of a coating to mobile equipment solely for repair of small areas of surface damage or minor imperfections. ~~[automotive touch-up repair and refinishing materials.]~~

Section 5. Reporting requirements.

Before February 28, 2005, sources subject to the provisions of this regulation shall submit documentation sufficient to substantiate that high efficiency transfer application techniques of coatings required in Section 3 are in use at their facility. The documentation shall also verify that all employees applying coatings are properly trained in the use of an HVLP sprayer, or equivalent application, and the handling of a regulated coating and any solvents used to clean the sprayer. The source shall retain the documentation on-site and make the documentation available to the cabinet and the U.S. EPA upon request. This documentation shall be sent to the Kentucky Division for Air Quality, 803 Schenkel Lane, Frankfort, KY 40601, Attn: Regulation

1 Development Section.


Lajuana S. Wilcher, Secretary
Environmental and Public Protection Cabinet


Date

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Administrative Regulation #: 401 KAR 59:760

Contact person: Carl Millanti

- (1) Provide a brief summary of:
 - (a) What this administrative regulation does:

This administrative regulation requires the use of high transfer efficiency application techniques at auto body repair and refinishing operations, and the proposed administrative regulation prescribes operating procedures to minimize the emissions of volatile organic compounds (VOC).
 - (b) The necessity of this administrative regulation:

The Environmental and Public Protection Cabinet is mandated to adopt and enforce administrative regulations that protect human health and the environment. The U.S. EPA has also required Kentucky to reduce VOC emissions in those areas of the state that are classified as nonattainment for ozone. This administrative regulation will provide for additional VOC reductions from auto body repair and refinishing operations.
 - (c) How this administrative regulation conforms to the content of the authorizing statutes:

KRS 224.10-100 requires the cabinet to promulgate administrative regulations for the prevention, abatement, and control of air pollution. This administrative regulation will reduce VOC emissions by requiring high efficiency transfer application techniques at automobile body shops and prescribing proper handling procedures for VOC-containing materials at these facilities.
 - (d) How this administrative regulation currently assists or will assist in the effective administration of the statutes:

This administrative regulation will reduce VOC emissions as required by KRS 224.10-100.
- (2) If this is an amendment to an existing administrative regulation, provide a brief summary of:
 - (a) How the amendment will change this existing administrative regulation:

This is not an amendment to an existing regulation. This is a new regulation.
 - (b) The necessity of the amendment to this administrative regulation:

This is not an amendment to an existing regulation. This is a new regulation.
 - (c) How the amendment conforms to the content of the authorizing statutes:

This is not an amendment to an existing regulation. This is a new regulation.
 - (d) How the amendment will assist in the effective administration of statutes:

This is not an amendment to an existing regulation. This is a new regulation.

- (3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation.
The Environmental and Public Protection Cabinet has identified approximately 70 **mobile equipment refinishing operations [businesses]** that will be affected by this administrative regulation. No government entities will be affected.
- (4) Provide an assessment of how the above group or groups will be impacted by either the implementation of this administrative regulation, if new, or by the change if it is an amendment:
Businesses subject to this administrative regulation will be required to use high transfer efficiency application techniques and to follow prescribed procedures for handling VOC-containing materials. Those that must purchase new spray guns will quickly recoup their investment by reducing material consumption by as much as 60%.
- (5) Provide an estimate of how much it will cost to implement this administrative regulation:
(a) Initially:
The cabinet will not incur any additional costs to implement this administrative regulation.
(b) On a continuing basis:
There will not be any continuing costs associated with the implementation of this administrative regulation.
- (6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation:
The cabinet's operating budget will continue to be used to implement and enforce the administrative regulation.
- (7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment.
No increase in fees or funding is necessary to implement the proposed administrative regulation.
- (8) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees.
The administrative regulation will not establish any fees, nor will it directly or indirectly increase any fees.
- (9) TIERING: Is tiering applied? (Explain why tiering was or was not used.)
No. Tiering would reduce the expected environmental benefits of this administrative regulation.

STATEMENT OF CONSIDERATION RELATING TO 401 KAR 59:760
Amended After Comments

Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality

- (1) A public hearing on 401 KAR 59:760, Commercial motor vehicle and mobile equipment refinishing operations, scheduled for December 22, 2004, at 6:00 p.m. was canceled. However, written comments were received during the public comment period.

- (2) The following individuals provided written comments:

<u>Name and Title</u>	<u>Organization</u>
Larry Brown	Veto the VET
Gregory C. Copley, Director	Kentucky BEAP
Tom FitzGerald, Director	Kentucky Resources Council, Inc.
Edward W. Krift	Ed Krift Body Shop & Auto Service
Rep. Paul H. Marcotte	Kentucky House of Representatives
Kay T. Prince, Chief	U.S. EPA Region 4, Air Planning Branch
Sen. Richard L. Roeding, R.Ph.	Kentucky Senate
Bob Ryan	Ryan Muffler Center, Inc.
Gregory J. Schneider	American Auto Body/Truck Shops, Inc.
Ron, Tom, and Leo Stamm	Fort Mitchell Garage
Thomas P. Sweat, P.E.	Environmental Planning Specialists, Inc.
Sen. Jack Westwood	Kentucky Senate
Rep. Addia K. Wuchner	Kentucky House of Representatives

- (3) The following individuals from the Environmental and Public Protection Cabinet responded to the written comments:

Sean Alteri, Environmental Control Supervisor	Division for Air Quality
Lona Brewer, Environmental Control Manager	Division for Air Quality
John Gowins, Environmental Control Supervisor	Division for Air Quality
John Lyons, Director	Division for Air Quality

Summary of Comments and Responses

(1) Subject Matter: Applicability

(a) Comment: The commenter requests clarification of the definition of "commercial motor vehicle and mobile equipment refinishing operation". The proposed regulation is unclear if facilities performing coating operations for the purposes of maintaining their on-site motor vehicles and mobile equipment will be subject to the regulation.

Thomas P. Sweat, Environmental Planning Specialists, Inc.

(b) Response: To clarify: The inclusion of the word "commercial" in the definition sufficiently declares which facilities are subject to the regulation. Facilities applying coatings for a commercial purpose are the intended regulated entities.

(2) Subject Matter: Applicability

(a) Comment: The type of businesses affected is not disclosed in the Regulatory Impact Analysis.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The cabinet concurs. Item (3) in the Regulatory Impact Analysis has been amended to include the type of businesses affected by this proposed administrative regulation.

(3) Subject Matter: Applicability

(a) Comment: The proposed regulation is unclear on what aspects of the application of VOC containing compounds to mobile equipment is intended to be regulated by the proposed administrative regulation.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: To clarify: When applying VOC-containing coatings on mobile equipment, the use of a high efficiency transfer application method is required for an applicable source. Section 4 of the proposed administrative regulation addresses the exemptions for the applicable source.

(4) Subject Matter: Compliance

(a) Comment: The February 1, 2005, deadline for compliance with equipment use and employee training and the February 28, 2005, certification deadline are unrealistic. The commenter suggests that the deadlines should be six months after the promulgation date.

Gregory C. Copley, Kentucky BEAP

(b) Response: The cabinet does not concur. The February compliance and certification deadlines were included in an emergency regulation, 401 KAR 59:760E, which was filed with the Legislative Research Commission (LRC) on November 15, 2004. The

emergency regulation became effective upon filing with the LRC Complier. As part of a public outreach effort on December 1, 2004, the Division informed possible applicable sources of the requirements and compliance deadlines.

(5) Subject Matter: Definition

(a) Comment: The term "automotive touch up repair" should be defined.
Gregory C. Copley, Kentucky BEAP

(b) Response: The cabinet acknowledges this comment. However, the language for Section 4(3) has been amended and clarified in response to Comment No. 9.

(6) Subject Matter: Definition

(a) Comment: In Section 5, the term "high efficiency transfer application techniques" is used but not defined.
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: To clarify: The cabinet has amended Section 5 to relate the high efficiency transfer application techniques to the approved techniques listed in Section 3 (1).

(7) Subject Matter: Definition

(a) Comment: The definition of "high volume, low pressure (HVLP) sprayer" should clarify that the maximum pressure is air pressure is not fluid pressure.
Kay T. Prince, U.S. EPA Region 4

(b) Response: The cabinet concurs. Section 1(2) has been amended accordingly.

(8) Subject Matter: Enforceability

(a) Comment: The proposed regulation is not enforceable. The Environmental and Public Protection Cabinet has not adopted a permitting or licensing program for area sources that will be affected by this regulation. Affected sources and manpower needed to enforce these provisions have not been identified.
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The cabinet does not concur. No new permitting or licensing program is necessary to enforce the amended regulation. As stated by the cabinet in the Regulatory Impact Analysis that was filed with the proposed regulation, no additional funds will be necessary to implement the amended provisions. Existing staff will be used to inspect sources subject to this regulation. Affected sources will be identified through databases maintained by the cabinet, other state agencies and trade organizations.

(9) Subject Matter: Exemptions

(a) Comment: Clarification of the proposed exemptions is necessary for understanding. "Application of automotive touch-up repair and refinishing materials" can be read to exclude all application of automotive refinishing materials. The commenter requests an explanation of the logic for the exclusions in Section 4 (1) and (3) of the proposed administrative regulation "since they appear broad enough to exclude complete re-coating of vehicles under the rubric of 'airbrushing' or 'touch up' refinishing."

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: To clarify: The logic or intent of the exclusions listed in Section 4 is to allow facilities the ability to repair small areas of surface damage and minor imperfections. The exemptions are not intended for applicable facilities to circumvent the regulatory requirements. To further clarify that the exemption is limited to automotive touch-up repair and does not include refinishing operations, Section 4(1) and 4(3) have been amended.

(10) Subject Matter: Operating Requirement

(a) Comment: The term "properly trained" should be defined. A commenter suggests that the term "properly trained" should include a review of EPA's training material at CCAR-GreenLink® Virtual Shop, <http://www.ccar-greenlink.org/cshops/training.html>.

Gregory C. Copley, Kentucky BEAP

Larry Brown, Veto the Vet

(b) Response: The cabinet concurs in part. The cabinet does not intend to require applicable facilities to review the suggested on-line training material. However, Section 3(2) will be amended to require equipment operators to be properly trained and operate the equipment in accordance with the manufacturer's specifications.

(11) Subject Matter: Operating Requirement

(a) Comment: A new paragraph requiring the equipment to be operated according to the manufacturer's specification should be added to Section 3. The commenter explains that operating spray equipment above the recommended air pressure creates excess overspray and emissions.

Gregory C. Copley, Kentucky BEAP

(b) Response: The cabinet concurs. Section 3(1) has been amended accordingly.

(12) Subject Matter: Operating Requirement

(a) Comment: The use of low VOC solvent coatings should be mandated in the regulation.

Gregory C. Copley, Kentucky BEAP

(b) Response: The cabinet does not concur. This regulation reduces the VOC emissions by requiring the use of high efficiency transfer applications for automobile and equipment refinishing operations. A mandate requiring the use of low VOC solvent coatings would go beyond the scope of this regulation and would be an additional economic burden on the small businesses that are affected.

(13) Subject Matter: Operating Requirement

(a) Comment: The regulation requires cloth, paper, or absorbent material to be kept in nonabsorbent, non-leaking containers and kept closed. Can these items be allowed to safely dry with the car or the item that was just painted or coated? "It would appear that no additional VOC would be escaping in the air. To follow the regulation, the cloth or paper would or could maintain the VOC moisture indefinitely or require a special disposing method that may put the HVLP user at risk for fire."

Larry Brown, Veto the Vet

(b) Response: The cabinet does not concur. If the absorbent material is not contained in a non-leaking container and allowed to dry with the coated item, additional VOC will be emitted through the process of evaporation. The requirement of keeping cloth, paper, or absorbent material in a closed, non-leaking container is in accordance with the National Fire Protection Association's NFPA 30A, *Code for Motor Fuel Dispensing Facilities and Repair Garages*. The user will not be at risk for fire if the container is kept away from an incendiary device or heat source. If oily rags are piled and are not in an airtight container, the pile may possibly spontaneously combust in the presence of oxygen.

(14) Subject Matter: Operating Requirement

(a) Comment: Section 3 of the proposed administrative regulation requires the use of a high efficiency transfer application technique to apply any finish to mobile equipment. However, the term "finish" is not defined. The commenter suggests either defining "finish" or substituting the term "any VOC-containing coating".

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The cabinet concurs. Section 3(1) will be amended to substitute the phrase "coating containing a VOC as a pre-treatment, primer, sealant, basecoat, clear coat, or topcoat to mobile equipment for commercial purposes" for "finish".

(15) Subject Matter: Operating Requirement

(a) Comment: Please consider adding "airless spray" to Section 3(1).

Kay T. Prince, U.S. EPA Region 4

(b) Response: The cabinet concurs. "Airless spray" has been included in Section 3(1).

(16) Subject Matter: Public Participation

(a) Comment: Section 3(1)(j) does not include a public participation process for determining whether other coating application methods achieve emission reductions equivalent to high volume, low pressure or electrostatic spray application methods.
Kay T. Prince, U.S. EPA Region 4

(b) Response: The cabinet concurs. Section 3(1)(j) has been amended accordingly.

(17) Subject Matter: Public Participation

(a) Comment: The commenter requests that before making any decisions, ask for input from leading auto body repair facilities.

Gregory J. Schneider, American Auto Body/Truck Shops, Inc.

(b) Response: The cabinet acknowledges this comment. As part of a public outreach to inform the applicable facilities, the cabinet conducted a telephone survey to determine the number of affected facilities. The cabinet performed extensive research on this type of control strategy, including regulations promulgated by surrounding states. In addition, the cabinet mailed a copy of the proposed administrative regulation to approximately 1000 interested parties in accordance with KRS 13A requirements.

(18) Subject Matter: Recordkeeping Requirement

(a) Comment: The regulation should require facilities to maintain records of training, equipment certification and coating usage for a minimum 5 year period.

Gregory C. Copley, Kentucky BEAP

(b) Response: The recordkeeping of coating usage is not a requirement in this proposed administrative regulation. This proposed administrative regulation requires the use of high efficiency transfer application techniques and certification of training. Section 5 has been amended to require applicable facilities to keep their equipment and training records on-site and make the information available upon cabinet and U.S. EPA request.

(19) Subject Matter: Reporting Requirement

(a) Comment: The reporting requirements in Section 5 appear to conflict with the exemptions listed in Section 4 in the phrase "sources subject to the provisions of this regulation".

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The cabinet concurs. Section 5 has been amended to limit the reporting requirements to those sources subject to Section 3 of this proposed administrative regulation.

(20) Subject Matter: Support

(a) Comment: "I am not against regulating refinishing facilities, as we are in favor of reducing pollution in all forms."

Edward W. Krift, Ed Krift Body Shop & Auto Service

Bob Ryan, Ryan Muffler Center, Inc.

Ron, Tom, and Leo Stamm, Fort Mitchell Garage

(b) Response: The cabinet acknowledges this comment.

(21) Subject Matter: Support

(a) Comment: Thank you for the opportunity to show my support of this important matter.

Sen. Jack Westwood, Kentucky Senate

Sen. Richard L. Roeding, R.Ph., Kentucky Senate

Rep. Paul H. Marcotte, Kentucky House of Representatives

Rep. Addia K. Wuchner, Kentucky House of Representatives

(b) Response: The cabinet acknowledges this comment.

**Summary of Statement of Consideration and Actions Taken
By the Environmental and Public Protection Cabinet**

General Summary

The Environmental and Public Protection Cabinet received comments on the proposed amendment to 401 KAR 59:760, Commercial motor vehicle and mobile equipment refinishing operations. This Statement of Consideration, filed with the Legislative Research Commission in accordance with KRS Chapter 13A, responds to comments that were submitted to the cabinet by interested individuals.

The proposed amendment to the administrative regulation was published in the December 1, 2004 issue of the *Administrative Register of Kentucky*. Newspaper advertisements announcing the public hearing were published in newspapers of wide circulation throughout the Commonwealth. Copies of the proposed administrative regulation were mailed to the approximately 1,000 individuals on the agency's mailing list. Copies of the proposed amendment were distributed to the Environmental Quality Commission and were also made available for public inspection at the Division for Air Quality's regional offices, the Louisville Metro Air Pollution Control District, and selected County Clerk's offices throughout the Commonwealth.

Summary of Comments

The Environmental and Public Protection Cabinet received thirteen (13) written statements prior to the close of the public comments period. These statements contained twenty-one (21) individual comments addressing the following areas of concern:

• Applicability	3 comments
• Compliance	1 comments
• Definition	3 comments
• Enforceability	1 comment
• Exemptions	1 comment
• Operating Requirement	6 comments
• Public Participation	2 comments
• Recordkeeping Requirement	1 comment
• Reporting Requirement	1 comment
• Support	2 comments

Summary of Actions Taken

Page 2

Section 1(2)

Line 2

After "maximum", insert "air pressure".

Page 2

Section 3(1)

Line 14

After "techniques", insert , in accordance with manufacturer's specifications.

Page 2

Section 3(1)

Line 14

After "any", insert coating containing a VOC as a pre-treatment, primer, sealant, basecoat, clear coat, or topcoat to mobile equipment for commercial purposes

Delete "finish to mobile equipment".

Page 2

Section 3(1)(h)

Line 23

After "spray;", insert "(i) Airless spray;".

Page 3

Section 3(1)

Line 1

Insert "(j)", delete "(i)".

Page 3

Section 3(1)

Line 2

Insert "(k) Any other", delete "(j) Other".

Page 3

Section 3(1)(j)

Line 2

After "the", insert "applicable facility".

Delete "person".

Page 3
Section 3(1)(j)
Line 4

After "methods.", insert This demonstration shall be submitted to and approved by the cabinet. The cabinet shall:
1. Hold a public hearing on the demonstration; and
2. Submit the demonstration to U.S. EPA for approval

Page 3
Section 3(2)
Line 6

After "application,", insert in accordance with manufacturer's specifications,

Page 3
Section 4(1)
Line 19

After "coating", insert for graphic designs, stenciling, lettering or other identification marking through the use of an air brush method;
Delete "through the use of an airbrush method for stenciling, lettering, and other identification marking;"

Page 3
Section 4(3)
Line 22

After "application of", insert a coating to mobile equipment solely for repair of small areas of surface damage or minor imperfections.
Delete "automotive touch-up repair and refinishing materials."

Page 4
Section 5
Line 3

After "coatings", insert "required in Section 3".

Page 4
Section 5
Line 6

After "sprayer.", insert The source shall retain the documentation on-site and make the documentation available to the cabinet and the U.S. EPA upon request.

Page 8
Regulatory Impact Analysis
Item (3)

After "70", insert "mobile equipment refinishing operations".
Delete "businesses".

Appendix E

**Supporting Information Regarding
this SIP Revision**

**VOC Emission Reductions From
Cold Cleaning Degreasing Area Source Emissions in Northern Kentucky
By Adopting Regulatory Language Lowering the Solvent Vapor Pressure**

NKY County	2005*		2005**		Rule**** Effectiveness	2005		2008 Area		2010 Area	
	Total Solvent Degreasing Area Source Projected SIP VOC Emissions (tpsd)	Only Cold Cleaning Area Source EF Adjustment Factor	Cold Cleaning Degreasing Area Source Projected SIP VOC Emissions (tpsd)	Cold Cleaning Lower Solvent Vapor Pressure VOC % Emission Reduction***		Cold Cleaning Degreasing Area Source Projected SIP VOC Emission Reduction (tpsd)	1996- 2005 Growth Factor	1996- 2008 Growth Factor	Cold Cleaning Degreasing Area Source Projected SIP VOC Emission Reduction (tpsd)	1996- 2010 Growth Factor	
Boone	0.38	84.0%	0.32	67.0%	80.0%	0.17	1.29647	1.41368	0.19	1.49765	0.20
Campbell	0.43	84.0%	0.36	67.0%	80.0%	0.19	1.03077	1.04124	0.19	1.04828	0.19
Kenton	0.78	84.0%	0.66	67.0%	80.0%	0.35	1.02578	1.03452	0.35	1.04039	0.35
	1.59		1.34			0.71			0.73		0.74

*2005 projected total surface cleaning VOC emissions were obtained from the current SIP's maintenance plan for the Kentucky portion of the Cincinnati-Hamilton 1-hour ozone maintenance area (Please see county VOC Emissions Summary in Appendix I of the northern Kentucky redesignation request for projected 2005 total surface cleaning VOC emissions).

**Total projected 2005 surface cleaning VOC emissions adjusted to reflect only 2005 cold cleaning degreasing emissions based on the per capita emission factors used to determine cold cleaning degreasing emissions as follows:

Cold Cleaning Emission Factors (2.5 Automobile Repair and Manufacturing 1.1) =
Total Surface Cleaning Emission Factors =

lb/yr/person
3.6
4.3

Cold Cleaning Emission Factors / Total Surface Cleaning Emission Factor =

84%

***Estimated VOC percent emission reduction obtained from Indiana rule information provided by Steven Rosenthal, Region 5, Illinois, Indiana and Maryland.

****EPA rule effectiveness default of 80% used to calculate the cold cleaning degreasing VOC emission reduction.

**VOC Emission Reductions Beyond EPA's Federal Rule
From Mobile Equipment Refinishing Area Source Emissions in Northern Kentucky
By Adopting Regulatory Language Requiring the Use High Transfer Efficiency Spray Guns**

(Reduction Based on Ozone Transport Commission (OTC) Model Rule Development)***

NKY County	2005*		2005**		2005*** Rule**** Effectiveness	2005		2008		2010	
	Total Mobile Equipment Refinishing Projected SIP VOC Emissions (Reflects 27% Reduction) (tpsd)	Total Mobile Equipment Refinishing Projected SIP VOC Emissions Less 10% more per Seitz Memo (tpsd)	Total Mobile Equipment Refinishing Projected SIP VOC Emissions (Available for Reduction) (tpsd)	2005 Total Mobile Equipment Refinishing Projected SIP VOC % Emission Reduction***		1996- 2005 Growth Factor	1996- 2008 Growth Factor	2008 Total Mobile Equipment Refinishing Projected SIP VOC Emission Reduction (tpsd)	1996- 2010 Growth Factor	2010 Total Mobile Equipment Refinishing Area Source Projected SIP VOC Emission Reduction (tpsd)	
Boone	0.30	0.03	0.27	35.0%	80.0%	0.08	1.29647	1.41368	0.09	1.49765	0.09
Campbell	0.29	0.03	0.26	35.0%	80.0%	0.07	1.03077	1.04124	0.07	1.04828	0.07
Kenton	0.48	0.05	0.43	35.0%	80.0%	0.12	1.02578	1.03452	0.12	1.04039	0.12
	1.07	0.11	0.96			0.27			0.28		0.28

*2005 projected mobile equipment (automotive) refinishing VOC emissions were obtained from the current SIP's maintenance plan for the Kentucky portion of the Cincinnati-Hamilton 1-hour ozone maintenance area (Please see county VOC Emissions Summary in Appendix I of the northern Kentucky redesignation request for projected 2005 total surface cleaning VOC emissions).

Kentucky's mobile equipment refinishing SIP emissions reflects a 27% VOC emission reduction per EPA's national rule for automotive refinish coatings.

**Per a 1994 Seitz memo, it indicated that a 37% VOC emission reduction from autobody (mobile equipment) refinishing emissions could be taken in 15% plans for VOC. Therefore since Kentucky took a 27% reduction in its SIP, it is subtracting off an additional 10% from the total autobody (mobile equipment) refinishing emissions before taking any reductions beyond EPA's federal automotive refinish coatings rule. A copy of the EPA Seitz memo is included in Appendix E.

***The percent reduction beyond EPA's federal rule for automotive refinish coatings rule is based on an Ozone Transport Commission (OTC) March 31, 2001, Pechan Report entitled "Control Measure Development Support Analysis of Ozone Transport Commission Model Rules". Please see OTC model rule report at www.otc.org/document.asp?Fview=Report#.

****Per EPA guidance 80% rule effectiveness was applied.

**Summary of VET Onroad Mobile Emissions to be Replaced with Equivalent and Contemporaneous Emission Reductions
Due to Closing the NKY VET* - Emissions expressed as tons per summer day (tpsd)**

	2005** (tpsd)	2008 (tpsd)	2010 (tpsd)
VOC	0.78	0.57	0.66
CO	12.50	10.64	12.59
NOx	0.29	0.02	0.09

Onroad Mobile Emissions W/VET (tpsd)		Onroad Mobile Emissions W/O VET (tpsd)				Difference 2005**		
2005		2005						
County	VOC	CO	NOx	VOC	CO	NOx	CO	NOx
Boone	3.61	47.89	9.73	3.92	52.91	9.85	5.02	0.12
Campbell	1.89	25.23	5.1	2.06	27.87	5.16	2.64	0.06
Kenton	3.48	46.24	9.38	3.78	51.08	9.49	4.84	0.11
Total	8.98	119.36	24.21	9.76	131.86	24.50	12.50	0.29

Onroad Mobile Emissions W/VET (tpsd)				Onroad Mobile Emissions W/O VET (tpsd)				Difference		
2008				2008				2008		
County	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	
Boone	2.97	39.72	7.82	3.20	44.02	7.83	0.23	4.30	0.01	
Campbell	1.51	20.29	3.98	1.63	22.49	3.98	0.12	2.20	0.00	
Kenton	2.85	38.12	7.50	3.07	42.26	7.51	0.22	4.14	0.01	
Total	7.33	98.13	19.30	7.90	108.77	19.32	0.57	10.64	0.02	

Onroad Mobile Emissions W/VET (tpsd)				Onroad Mobile Emissions W/O VET (tpsd)				Difference		
2010				2010				2010		
County	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	
Boone	2.87	40.05	7.08	3.14	45.19	7.12	0.27	5.14	0.04	
Campbell	1.47	20.57	3.63	1.61	23.21	3.65	0.14	2.64	0.02	
Kenton	2.68	37.45	6.62	2.93	42.26	6.65	0.25	4.81	0.03	
Total	7.02	98.07	17.33	7.68	110.66	17.42	0.66	12.59	0.09	

*Onroad mobile emissions determined using Mobile6.2.

**The 2005 emissions increase was utilized to determine the target emission reduction needed since its emissions were the highest.

SIP Revision for the Kentucky Portion of the Cincinnati-Hamilton Ozone Maintenance Area
(End the NKY VET Program With Equivalent and Contemporaneous Emission Reductions)
(Emissions expressed as tons per summer day (tpsd))

Increased Onroad Mobile Emissions With Closing the NKY VET

	Onroad* 2005 Emissions Increases - No VET (tpsd)	Onroad 2008 Emissions Increases - No VET (tpsd)	Onroad 2010 Emissions Increases - No VET (tpsd)
VOC	0.78	0.57	0.66
CO	12.50	10.64	12.59
NOx	0.29	0.02	0.09

**Equivalent and Contemporaneous
Emission Reductions**

	2005 NOx Emission Reductions (tpsd)	2005 VOC Emission Reductions (tpsd)	2008 NOx Emission Reductions (tpsd)	2008 VOC Emission Reductions (tpsd)	2010 NOx Emission Reductions (tpsd)	2010 VOC Emission Reductions (tpsd)
2005 Cold Cleaning Degreasing Emission Reduction (tpsd)**	0.00	0.71	0.73	0.74	0.00	0.74
2005 Mobile Equipment Refinishing Emission Reduction (tpsd)***	0.00	0.27	0.28	0.28	0.00	0.28
Total Equivalent and Contemporaneous Emission Reductions (tpsd)	0.00	0.98	1.01	1.02	0.00	1.02

Kentucky Portion of the Cincinnati-Hamilton 1-Hour Ozone Maintenance Area
Equivalent Amount of VOC Emissions Substituted for NOx Emissions Increase

	2005 (tpsd)	2008 (tpsd)	2010**** (tpsd)
Total Ky VOC Emissions	32.56	32.58	34.05
2005 Onroad Mobile NOx Emissions Increase	0.29	0.29	0.29
Total Ky NOx Emissions	64.77	62.80	63.77
VOC/NOx Ratio (Rounded to two decimals)	0.50	0.52	0.53
NOx to VOC Equivalent Emissions as VOC	0.1450	0.1508	0.1537
NOx to VOC Equivalent Emissions as VOC (Rounded to two decimals)	0.15	0.15	0.15

Total Emissions Increase as VOC to be Replaced

	2005 Onroad Mobile NOx Emission Increases (tpsd)	2005 Onroad Mobile VOC Emission Increases (tpsd)
Onroad Mobile Emissions Increase From Ending the NKY VET to be Replaced by Emission Reductions *	0.29	0.78
NOx Emissions Increase as VOC ****	-0.29	0.15
Resulting Target Emissions Increase as VOC to be Reduced	0.00	0.93

**Resulting Difference
(Equivalent and Contemporaneous Emission Reductions Minus
Onroad Emission Increases) (tpsd)*******

	0.00	0.05
--	------	------

**2005 increased emissions utilized since its emissions are the higher.

**Cold Cleaning Degreasing VOC emission reductions to be realized by lowering the solvent vapor pressure.

***Mobile Equipment Refinishing VOC emission reductions to be realized by requiring the use of high transfer efficiency spray guns.

****Per EPA guidance, the following equation was utilized to arrive at the above NOx to VOC equivalent emissions:

2005 Equivalent VOC Emissions Increase = (Total Ky VOC Emissions / Total Ky NOx Emissions) x 2005 NOx Emissions Increase

Using the above equation with the 2010 VOC/NOx ratio would provide the following: 0.15 tpsd Equivalent VOC emissions = ((34.05 / 63.77) x 0.29).

The 2010 VOC/NOx ratio (i.e., 0.53) was utilized as it provided the higher equivalent VOC emissions before rounding. (Please see Appendix B for details on calculating the VOC/NOx ratio.)

*****Indicates that the total VOC emission reductions will make up and slightly exceed those documented to occur from the NKY VET.

MEMORANDUM

SUBJECT: Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance (AIM) Coating Rule and the Autobody Refinishing Rule

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Director, Air Pesticides and Toxics
Management Division, Regions I and IV
Director, Air and Waste Management Division,
Region II
Director, Air, Radiation and Toxics Division,
Region III
Director, Air and Radiation Division,
Region V
Director, Air, Pesticides and Toxics Division,
Region VI
Director, Air and Toxics Division,
Regions VII, VIII, IX, and X

AIM Coatings

This memorandum supplements my memorandum of December 9, 1993 concerning State credit for reductions from the forthcoming Federal AIM coating rule. In that memorandum, we provided conditions that States must meet in order to take credit for the AIM coating rule. The conditions were for States to submit a commitment by April 1994 to adopt and submit a State rule by March 1995 if EPA does not promulgate a national rule by February 1995. It is our expectation that EPA will not promulgate a national rule until May 1996, with an effective date of August 1996.

We now anticipate that this rule will reduce AIM emissions in unregulated areas by approximately 15 percent by the end of 1996. This estimated reduction was determined using 1990 baseline VOC levels, incorporates growth, and includes accounting

for rule effectiveness and rule penetration. Reductions in years beyond 1996 are expected, and additional guidance may be issued for these reductions in the future.

Because a number of States have indicated that reductions from this source category are crucial to their 15 percent rate-of-progress plans, and that there is concern that some States may not be able to adopt their own rule before March 1995, we find the following two amendments to our previous conditions acceptable:

1. States that are adopting their own rule may now have until July 1995 to complete the rule.
2. States that are having difficulties adopting their own rule may take credit for the 15 percent reduction described above without adopting or committing to adopt back-up measures.

We encourage States that take the 15 percent credit for AIM to develop backup measures in case the national rule is delayed beyond 1996. If EPA's rule does not provide a 15 percent reduction by the end of 1996, the State will be responsible for developing control measures to make up the shortfall. If the State fails to do so, EPA will have to disapprove the 15 percent rate-of-progress plan. Fifteen percent rate-of-progress plans that assume a 15 percent reduction for the AIM coating rule may be found complete if all other completeness criteria are met.

Autobody Refinishing

In addition to the above credit for the 15 percent rate-of-progress plans, EPA finds it acceptable to allow a 37 percent reduction from current emissions for autobody refinishing. The national rule for autobody refinishing is expected to be proposed in July 1995 and promulgated in February 1996, with an effective date of August 1996. Because of the limited number of manufacturers that this rule affects, States may assume 100 percent rule effectiveness presuming the instructions on how to apply the coatings are followed. In addition, rule penetration does not apply because the rule affects all sources within the category. We encourage States to develop backup measures in this case as well because the same approval restrictions will apply.

If you have any questions or comments concerning this approach, please contact Kimber Scavo at (919) 541-3354, or Laurel Schultz at (919) 541-5511. Any questions regarding the status of the AIM rule may be directed to Ellen Ducey at (919) 541-5408. Any questions regarding the status of the autobody

refinishing rule may be directed to Mark Morris at (919) 541-5416.

cc: Sally Shaver	Rich Ossias
Bruce Jordan	William Becker
Lydia Wegman	
Alan Eckert	

bcc: Tom Helms
Kimber Scavo
Laurel Schultz
Ellen Ducey
Mark Morris
Bill Johnson
David Cole
Howard Hoffman
Regional Ozone SIP Contacts

OAQPS:AQSSD:OPSG:KIMBER SCAVO:JKING:EXT. 3354:11/21/94

DISK: SCAVO.JK FILE: MEMOAIM.JS

This response has been coordinated with Ellen Ducey and Mark Morris (ESD) and Howard Hoffman (OGC).

Appendix F

Public Hearing Notice and Documentation

**KENTUCKY DIVISION FOR AIR QUALITY
NOTICE OF PUBLIC HEARING
TO REVISE KENTUCKY'S STATE IMPLEMENTATION PLAN**

The Kentucky Environmental and Public Protection Cabinet will conduct a public hearing on January 4, 2005, at 6:00 p.m. (ET) in the Conference Room of the Northern Kentucky Area Development District (NKADD), 22 Spiral Drive, Florence, Kentucky. This hearing is being held to receive comments on a proposed State Implementation Plan (SIP) revision for the Kentucky portion of the Cincinnati-Hamilton County 1-hour ozone maintenance plan. This revision, when approved by the U.S. EPA, will move the area's vehicle emissions testing program to the contingency measures portion of the maintenance plan and document that equivalent and contemporaneous emission reductions from other programs, including the regulation listed below, will occur to replace emission reductions documented to occur from the vehicle emissions testing program. The Cabinet is proposing to adopt 401 KAR 59:760 to require the use of high transfer-efficiency spray guns for auto body refinishing operations. The counties involved are Boone, Kenton, and Campbell Counties.

This hearing is open to the public and all interested persons will be given the opportunity to present testimony. To assure that all comments are accurately recorded, the Division requests that oral comments presented at the hearing also be provided in written form, if possible. To be considered part of the hearing record, written comments must be received by close of the public hearing. Comments should be sent to the contact person.

The full text of the proposed SIP revision is available for public inspection and copying during regular business hours (8:00 a.m. to 4:30 p.m.) at the locations listed below. Any individual requiring copies may submit a request to the Division for Air Quality in writing, by telephone, or by FAX. Requests for copies should be directed to the contact person. In addition, an electronic version of the proposed SIP revision document and relevant attachments can be downloaded from the Division for Air Quality's web site at:

http://www.air.ky.gov/homepage_repository/Public+Hearings.htm

The hearing facility is accessible to people with disabilities. An interpreter or other auxiliary aid or service will be provided upon request. Please direct these requests to the contact person.

CONTACT PERSON: John E. Gowins (Evaluation Section) and Carl Millanti (Regulation Section), Division for Air Quality, 803 Schenkel Lane, Frankfort, Kentucky 40601. The phone number is (502) 573-3382. The FAX number is (502) 573-3787. E-mail addresses are john.gowins@ky.gov and carl.millanti@ky.gov.

The Environmental and Public Protection Cabinet does not discriminate on the basis of race, color, national origin, sex, age, religion, or disability and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford an individual with a disability an equal opportunity to participate in all services, programs, and activities.

Lou-Metro Air Pollution Control District
850 Barret Avenue, Suite 205
Louisville, KY 40204-1745

Ashland Regional Office
1550 Wolohan Drive, Suite 1
Ashland, KY 41102-8942

Bowling Green Regional Office
1508 Westen Avenue
Bowling Green, KY 42104

Florence Regional Office
8020 Veterans Mem Dr, Suite 110
Florence, KY 41042

Frankfort Regional Office
643 Teton Trail, Suite B
Frankfort, KY 40601-1758

Hazard Regional Office
233 Birch Street, Suite 2
Hazard, KY 41701-2179

London Regional Office
875 S Main Street
London, KY 40741

Owensboro Regional Office
3032 Alvey Park Dr W, Suite 700
Owensboro, KY 42303-2191

Paducah Regional Office
4500 Clarks River Road
Paducah, KY 42003-0823

Boone County Clerk
2950 Burlington Pike
Burlington, KY 41005

Campbell County Clerk
340 York Street
Newport, KY 41071

Kenton County Clerk
303 Court Street
Covington, KY 41011

Boone County Public Library
8899 U.S. 42
Union, KY 41091-7644

Campbell County Public Library
3920 Alexandria Pike
Cold Spring, KY 41076

Kenton County Public Library
502 Scott Boulevard
Covington, KY 41011

Appendix G

**Response to Comments Received
During Public Comment Period**

Response to Comments on the Proposed Amendment to 1-Hour Ozone SIP VET Removal

- 1. (a) Comment:** Unless and until the U.S. Environmental Protection Agency (U.S. EPA) approves an amendment to the State Implementation Plan (SIP) to remove the Vehicle Emissions Testing (VET) program, the program must continue to be maintained and enforced as a matter of federal law.
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet concurs.
- 2. (a) Comment:** If the Cabinet reverses its current interpretation and undertakes any action to terminate the Northern Kentucky Emissions Check program prior to or absent lawful approval by U.S. EPA, KRC reserves the right to initiate a citizen suit or to seek other appropriate remedies to assure that the SIP obligations are followed.
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet acknowledges this comment.
- 3. (a) Comment:** The proposed amendment does not demonstrate that the elimination of the VET will be offset by other comparable reductions in emissions resulting in equal or better air benefit.
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet does not agree. The SIP revision shows that the reductions lost due to the removal of the VET program equate to 0.93 tons per summer day (tpsd) of volatile organic compounds (VOC). The reductions from the cold cleaning degreasing regulation are 0.71 tpsd VOC, and the reductions from the mobile equipment refinishing regulation are 0.27 tpsd VOC, which totals 0.98 tpsd VOC.
- 4. (a) Comment:** The proposed amendment does not demonstrate that the elimination of the VET will not interfere with progress towards attainment of the new 8-Hour Ozone standard, for which the Northern Kentucky area has been designated nonattainment.
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet does not agree. In a *Federal Register* published Monday, January 3, 2005, relating to the SIP revision to end the VET in Louisville, U.S. EPA articulated their approach in considering this issue. EPA's position on this matter can be found on page 57 of the register, where it states; "Prior to the time that attainment demonstrations are due for the 8-hour ozone and PM_{2.5} standards, it is unknown what suite of control measures are needed for a given area to attain these standards. During this period, to demonstrate no interference with any applicable NAAQS or requirement of the Clean Air Act under section 110(l), EPA believes it is appropriate to allow states to substitute equivalent emission reductions to compensate for the control measure being moved from the active portion of the SIP to the contingency provisions, as long as actual

emissions in the air are not increased. EPA concluded that preservation of the status quo air quality during the time new attainment demonstrations are being prepared will prevent interference with the states' obligations to develop timely attainment demonstrations."

5. (a) **Comment:** EPA should defer approval of a SIP revision until the cabinet makes the attainment demonstration for the 8-hour ozone standard and demonstrates that the inspection and maintenance program is not necessary to achieve that standard.

Tom FitzGerald, Kentucky Resources Council, Inc.

- (b) **Response:** The Cabinet does not agree. As stated in the response above, prior to the time that attainment demonstrations are due for the new standards, EPA believes it is appropriate to interpret 110(l) to allow substituting equivalent emissions reductions for a control measure in the SIP. This language states that EPA will allow the substitution of equivalent emissions reductions for a control measure in the SIP.

6. (a) **Comment:** KRC believes EPA's "strict" interpretation is the only interpretation consistent with the plain language and intent of the Act and that removal of an approved and implemented control measure controlling both precursors of ozone and particulates, at a time when it is not known what additional reductions will be needed to attain the 8-hour ozone and fine particulates standard in the northern Kentucky airshed, is of questionable legality.

Tom FitzGerald, Kentucky Resources Council, Inc.

- (b) **Response:** The Cabinet does not agree. U.S. EPA has stated in a May 11, 2004 letter to the Metro Louisville Air Pollution Control District, and in a *Federal Register* published January 3, 2005, that this strict interpretation is not necessary or appropriate.

7. (a) **Comment:** Until EPA completes the guidance on what constitutes "interference" (guidance that the May 12, 2004 memo from Tom Helms to Air Program Managers indicated is under development), it is difficult to understand how EPA could defend an ad-hoc finding of "non-interference."

Tom FitzGerald, Kentucky Resources Council, Inc.

- (b) **Response:** The Cabinet acknowledges this comment. Please see previous responses.

8. (a) **Comment:** The Commonwealth is proposing to remove from the array of measures available to meet the new standard, a currently implemented and effective control measure, without knowing what additional reductions may be needed and what control measures are available and at what cost. It would do a great disservice to the region if the I/M measure were removed in the short term, only to prove necessary (from a cost or availability standpoint) to achieve the more rigorous ozone and particulate standards, necessitating significant restart costs, a shifting of emissions control costs to other sectors, or imposition of more intrusive controls on on-road mobile sources.

Tom FitzGerald, Kentucky Resources Council, Inc.

- (b) **Response:** The Cabinet does not agree. Concurrent with the removal of the VET program, the proposed SIP revision amends and existing regulation and promulgates a new regulation which provide compensating reductions which offset those lost from the ending of the VET program. State statute requires that the Cabinet develop control strategies that do not rely on vehicle testing programs unless specifically required by federal statute or U.S. EPA.
9. (a) **Comment:** SJR 3 appears to require that the Cabinet first determine whether the I/M program will be necessary for achievement of the 8-hour ozone standard prior to approval or removal of the measure from the current SIP. Whether the measure is necessary requires the Cabinet to undertake an attainment demonstration to determine both the necessity and availability of additional control measures to achieve the newer standard.
Tom FitzGerald, Kentucky Resources Council, Inc.
- (b) **Response:** The Cabinet does not agree. Our reading of SJR 3 does not indicate that the Cabinet must determine if the I/M program will be necessary for achievement of the 8-Hour Ozone standard prior to removal of the measure from the current SIP.
10. (a) **Comment:** Assuming that EPA's interpretation is permissible, the proposed SIP amendment falls short of providing equivalent, surplus, quantifiable, permanent and enforceable emissions reductions to offset the loss of the I/M reductions.
Tom FitzGerald, Kentucky Resources Council, Inc.
- (b) **Response:** The Cabinet does not agree. As stated in an earlier response, the SIP revision shows that the reductions lost due to the removal of the VET program equate to 0.93 tons per summer day (tpsd) of volatile organic compounds (VOC). The reductions from the cold cleaning degreasing regulation are 0.71 tpsd VOC, and the reductions from the mobile equipment refinishing regulation are 0.27 tpsd VOC, which totals to 0.98 tpsd VOC. These reductions are equivalent, surplus, quantifiable, permanent and enforceable.
11. (a) **Comment:** Newport Steel reductions cannot be used.
Tom FitzGerald, Kentucky Resources Council, Inc.
- (b) **Response:** The Cabinet acknowledges this comment. This point is moot, however, since the Newport Steel reductions are not contained in this SIP revision.
12. (a) **Comment:** Reliance on NOx SIP Call reductions would be inappropriate.
Tom FitzGerald, Kentucky Resources Council, Inc.
- (b) **Response:** The Cabinet acknowledges this comment. As stated in the SIP revision package, the Cabinet is not using NOx SIP Call reductions for any of the offsetting emissions in order to move the VET program to the contingency measures portion of the SIP.
13. (a) **Comment:** Even if the use of NOx SIP Call reductions were appropriate, appropriate modeling and analysis would be needed to demonstrate that reductions of NOx from

utility stack height emissions would yield the same or better air quality benefit in ozone formation reduction as from ground-level exhaust emissions of VOCs and NOx.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet acknowledges this comment. This point is moot, however, since the NOx SIP Call reductions were not used in this revision.

14. (a) Comment: The Commonwealth has not demonstrated that the proposed amendments to 401 KAR 59:185 will yield reductions that are surplus, quantifiable, or enforceable.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet does not agree. The proposed 401 KAR 59:185 contains a requirement that prohibits the sale or use of a solvent in cold-cleaning with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20° C (68° F). This vapor pressure requirement is new to this regulation. There are no previous emissions reductions attributable to this new vapor pressure requirement in the regulation or SIP. The proposed amendment to the regulation also requires that the distributors and users of solvents maintain records for a minimum of five years that include the following information:

- i. The name and address of the solvent purchaser/supplier;
- ii. The date of the sale/purchase;
- iii. The type of solvent;
- iv. The unit volume of the solvent;
- v. The total volume of the solvent; and
- vi. The vapor pressure of the solvent measured in mm Hg at 20° C (68° F).

In accordance with Section 4 (3), the sale and use of a high vapor pressure solvent is prohibited sixty days after the effective date of the regulation. Therefore, these emission reductions are surplus, quantifiable, and enforceable, from the amendments to the regulation.

15. (a) Comment: The emissions factors used to project current emissions from cold solvent degreasing are not grounded in actual use data, but appear to have been based on generalized per capita estimates.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The methodology used for determining the emissions reductions, found in the proposed amendments to the existing regulation, is the same methodology used in the EPA approved redesignation to attainment for the 1-Hour Ozone Standard for the Northern Kentucky Area. The emissions factors used to project current emissions from cold cleaning degreasing operations were taken from the U.S. EPA publication Procedures for the Preparation of Emission Inventories for Carbon Monoxide and Precursors of Ozone, EPA-450/4-91-016. The emissions reductions were calculated using these factors in conjunction with the U.S. EPA approved emissions inventory for the Northern Kentucky counties of Boone, Campbell, and Kenton, which is contained in

the Request to Redesignate Kentucky Counties Located within the Cincinnati-Hamilton Moderate Ozone Nonattainment Area dated December 1999.

- 16. (a) Comment:** There has been no inventory provided to the public for review of facilities that are currently using solvent-based degreasing processes, whether those facilities are operating at higher vapor pressures, nor of facilities selling such solvents for use by facilities in the area. The actual usage and emissions from solvent-based degreasing has not been assessed, and the applicability of historic emissions data has not been validated.
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet does not agree. The public has had numerous opportunities to review inventories and inventory methodologies associated with this control measure. The method for developing the inventory is explained in the response to the previous comment. A detailed description of how emission reductions were calculated is located in Appendix E of the proposed amendment.

- 17. (a) Comment:** KRC expresses continuing frustration with the lack of state response to basic information requests necessary for commenter's or EPA to determine whether the reductions claimed from the proposed revision will in fact occur.
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet acknowledges this comment. The commenter is directed to the next five comments and their responses.

- 18. (a) Comment:** What is the basis for the Cabinet's assumption that implementing a cold cleaning degreasing regulation will yield 1.34 tons per day of reductions in the three northern Kentucky counties?
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet does not expect the cold cleaning degreasing regulation change will yield 1.34 tons per day reductions in the three northern Kentucky counties. The projected 2005 VOC emissions attributable to cold cleaning degreasing are 1.34 tons per day. The estimated amount of reductions attributable to cold cleaning degreasing regulation changes is 0.71 tons per day. The Division anticipates that the lower vapor pressure of cold cleaning solvents will reduce area source cold cleaning degreasing VOC emissions in the area by an estimated 67 percent. Reducing the initial 1.34 tons per day by 67%, and then applying 80% rule effectiveness yields 0.71 tons per day in reductions.

- 19. (a) Comment:** Does the Cabinet possess an inventory of suppliers and users of these solvents who would be affected by the regulation?
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The cabinet has an inventory of solvent users that are permitted. The cabinet is currently compiling a list of area sources and suppliers that may be impacted by this regulation.

- 20. (a) Comment:** Does the Cabinet have supporting documentation concerning the number of “sources” overall that will be affected; the number of gallons of solvent(s) used in the processes of those sources, and which sources may already have installed the storage, use and recovery procedures that would be required by the regulation?

Tom FitzGerald, Kentucky Resources Council, Inc.

(b)Response: The cabinet maintains a database of permitted and registered sources. For those sources, the number of sources and gallons of solvent used are known. The emissions from area sources have been estimated using EPA-approved calculations and emission factors which are part of Kentucky’s approved State Implementation Plan.

- 21. (a) Comment:** How does the Cabinet intend to monitor and enforce the regulation? Will permits be required for sources using cold cleaning degreasing solvents? How frequently will such facilities be inspected?

Tom FitzGerald, Kentucky Resources Council, Inc.

(b)Response: Agency personnel will enforce this regulation through on-site inspections. These will entail inspections of equipment, observations of operating procedures and record reviews. Depending on the emissions rate from a facility, permits will be required for sources subject to this regulation. Facilities will be inspected on a frequency that will be determined in conjunction with the agency’s other obligations.

- 22. (a) Comment:** How will the Cabinet determine and demonstrate that the claimed reductions are being achieved?

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: By the inspections and record keeping requirements described in the previous response.

- 23. (a) Comment:** The proposed regulation amendment provides that compliance with the new vapor pressure limits will not be required until December 15, 2007. The SIP amendment provides no offsetting reductions for those lost by terminating the I/M program until the enhanced regulation becomes enforceable.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The commenter is incorrect in stating that the amended regulation does not require compliance until December 15, 2007. This amended regulation became effective January 4, 2005. Those facilities subject to Section 4(3) shall comply with the requirements sixty days after the effective date. This compliance date is March 5, 2005. Although the regulation may allow an extension for compliance until this date, it is not automatic, and will be issued on a case-by-case basis.

- 24. (a) Comment:** The type of businesses affected is not disclosed in the Regulatory Impact Analysis.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The cabinet concurs. Item (3) in the Regulatory Impact Analysis has been amended to include the type of businesses affected by this proposed administrative regulation.

25. (a) Comment: The proposed regulation is unclear on what aspects of the application of VOC containing compounds to mobile equipment is intended to be regulated by the proposed administrative regulation.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: To clarify: When applying VOC-containing coatings on mobile equipment, the use of a high efficiency transfer application method is required for an applicable source. Section 4 of the proposed administrative regulation addresses the exemptions for the applicable source.

26. (a) Comment: In Section 5, the term "high efficiency transfer application techniques" is used but not defined.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: To clarify: The cabinet has amended Section 5 to relate the high efficiency transfer application techniques to the approved techniques listed in Section 3 (1).

27. (a) Comment: The proposed regulation is not enforceable. The Environmental and Public Protection Cabinet has not adopted a permitting or licensing program for area sources that will be affected by this regulation. Affected sources and manpower needs to enforce these provisions have not been identified.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The cabinet does not concur. No new permitting or licensing program is necessary to enforce the amended regulation. As stated by the cabinet in the Regulatory Impact Analysis that was filed with the proposed regulation, no additional funds will be necessary to implement the amended provisions. Existing staff will be used to inspect sources subject to this regulation. Affected sources will be identified through databases maintained by the cabinet, other state agencies and trade organizations.

28. (a) Comment: Clarification of the proposed exemptions is necessary for understanding. "Application of automotive touch-up repair and refinishing materials" can be read to exclude all application of automotive refinishing materials. The commenter requests an explanation of the logic for the exclusions in Section 4 (1) and (3) of the proposed administrative regulation "since they appear broad enough to exclude complete re-coating of vehicles under the rubric of 'airbrushing' or 'touch up' refinishing."

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: To clarify: The logic or intent of the exclusions listed in Section 4 is to allow facilities the ability to conduct their work properly. The exemptions are not intended for applicable facilities to circumvent the regulatory requirements.

29. (a) Comment: Section 3 of the proposed administrative regulation requires the use of a high efficiency transfer application technique to apply any finish to mobile equipment. However, the term "finish" is not defined. The commenter suggests either defining "finish" or substituting the term "any VOC-containing coating".
Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The cabinet concurs. Section 3(1) will be amended to substitute the term "any VOC-containing coating" for "finish".

30. (a) Comment: The reporting requirements in Section 5 appear to conflict with the exemptions listed in Section 4 in the phrase "sources subject to the provisions of this regulation".

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The cabinet concurs. Section 5 has been amended to limit the reporting requirements to those sources subject to Section 3 of this proposed administrative regulation.

31. (a) Comment: EPA, in its August 31, 2004 letter, provided no comments concerning the adoption of this regulation or whether the proposed reductions would be considered acceptable to offset in part the loss of the VET program and would satisfy Section 110(l). KRC assumes EPA will provide such comments during the formal federal review process, since it will be obligated to respond to these and other comments in determining whether to approve the state submittal. 5 U.S.C. 553.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet acknowledges this comment.

32. (a) Comment: The existing I/M program has vocal opponents, as well as many quiet supporters who understand that notwithstanding the minor annoyance of having one's car periodically tested, achieving healthful air quality requires reductions from on-road mobile sources as well as other sources of ozone pollutant precursors, and that vehicle maintenance monitored through I/M programs is part of the emission control equation.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet acknowledges this comment.

33. (a) Comment: The wisdom of eliminating I/M programs is a matter to be debated in the arena of politics, public health and economic policy. Reductions in ozone pollution impose economic costs on sources, just as non-control imposes costs on the public in the form of increased illness and pollution-related death. Within legal limits, a community must decide whether the costs of non-maintenance of cars should be paid by small or large businesses, which is the result of the proposed strategy in the SIP amendment.

Tom FitzGerald, Kentucky Resources Council, Inc.

(b) Response: The Cabinet acknowledges this comment.

- 34. (a) Comment:** We urge the DAQ to rescind the SIP revision in favor of a more comprehensive SIP revision as required for compliance with the 8-hour ozone standard.
Richard D. Brewer, Cinergy
- (b) Response:** The Cabinet was required by SJR 3 to submit to the EPA a SIP revision that would end the VET program in Northern Kentucky. U.S. EPA has not yet provided Phase II of the 8-Hour Ozone standard implementation guidance, therefore it is not possible to develop regulatory programs designed to meet the requirements for complying with this standard at this time. Prior to the time that attainment designations are due for the 8-Hour standard and to demonstrate no interference with any applicable National Ambient Air Quality Standard or requirement of the Clean Air Act, U.S. EPA believes it is appropriate to allow states to substitute equivalent emission reductions to compensate for the control measure being moved from the active portion of the SIP to the contingency provisions, as long as actual emissions in the air are not increased.
- 35. (a) Comment:** We request that the section entitled "Additional Reductions – NO_x SIP Call Reductions" be removed.
Richard D. Brewer, Cinergy
- (b) Response:** The Cabinet disagrees. This section was provided because it is important to note ongoing declining emission trends.
- 36. (a) Comment:** It is our experience that the VET is working. If the VET is discontinued, owners will have no incentive to have their vehicles inspected for emissions.
Ron, Tom & Leo Stamm, Fort Mitchell Garage
Bob Ryan, Ryan Muffler Center, Inc.
Edward W. Krift, Ed Krift Body Shop & Auto Service
- (b) Response:** The Cabinet acknowledges this comment.
- 37. (a) Comment:** "I am not against regulating refinishing facilities, as we are in favor of reducing pollution in all forms."
Edward W. Krift, Ed Krift Body Shop & Auto Service
Bob Ryan, Ryan Muffler Center, Inc.
Ron, Tom, and Leo Stamm, Fort Mitchell Garage
- (b) Response:** The cabinet acknowledges this comment.
- 38. (a) Comment:** Most of these shop owners and managers and painters are already using HVLP equipment because it makes good business sense. I don't think that it's going to make that much of a difference in the emissions that are in our area.
Ron Stamm, Fort Mitchell Garage
- (b) Response:** The Cabinet does not agree. The emissions reductions calculated for this control option take into account making this control mandatory, permanent and enforceable for all businesses using this type of equipment. Additionally the regulation

requires not only the use of high efficiency transfer equipment but has work practice requirements for cleaning this equipment and waste rag storage, and includes training requirements to ensure employees are trained in the proper use of such equipment. Businesses are required to certify to the Division that this equipment is being used, work practices followed, and all employees have been trained in proper usage of that equipment.

39. (a) **Comment:** American Auto Body/Truck Shops, Inc. wishes to express its concern regarding the decision to discontinue the Vehicle Emissions Testing Program and move to regulate the refinishing operations to offset the expected increase in emissions.
Gregory J. Schneider, American Auto Body/Truck Shops, Inc.

(b) **Response:** The Cabinet acknowledges this comment.

40. (a) **Comment:** The commenter requests that before making any decisions, ask for input from leading auto body repair facilities.
Gregory J. Schneider, American Auto Body/Truck Shops, Inc.

(b) **Response:** The cabinet acknowledges this comment. As part of a public outreach to inform the applicable facilities, the cabinet conducted a telephone survey to determine the number of affected facilities. The cabinet performed extensive research on this type of control strategy, including regulations promulgated by surrounding states. In addition, the cabinet mailed a copy of the proposed administrative regulation to approximately 1000 interested parties in accordance with KRS 13A requirements.

41. (a) **Comment:** This letter is in support of the new State Implementation Plan revision for Northern Kentucky, which would eliminate the vehicle emissions testing program in Boone, Kenton, and Campbell counties.

Richard L. "Dick" Roeding, Senate President Pro Tem

Jack Westwood, State Senator

Addia Wuchner, State Representative

(b) **Response:** The Cabinet acknowledges this comment.

42. (a) **Comment:** I wish to commend your cabinet for a thoughtful, scientifically valid proposal, which will meet the air quality goals while keeping any additional regulatory burdens on the citizens of Boone, Campbell, and Kenton counties to a minimum.
Paul H. Marcotte, State Representative

(b) **Response:** The Cabinet acknowledges this comment.

43. (a) **Comment:** Every sizeable urban area in the United States has employed the testing of our most prevalent source of pollution that is motor vehicles.
John R. Schmidt, NCAD.NET Corporation

(b) **Response:** The Cabinet acknowledges this comment.

- 44. (a) Comment:** This proposed SIP revision documents that if we give up the VET we will have two more tons of poison in our air per summer day.

John R. Schmidt, NCAD.NET Corporation

(b) Response: The Cabinet does not agree. This proposed SIP revision documents that removing the VET program will remove emission reductions equivalent to 0.93 tons per summer day of VOCs. However, this proposed SIP revision also includes the modification of an existing regulation and the establishment of a new regulation whose effect will reduce emissions by 0.98 tons per summer day VOC. This produces an emissions reduction beyond those needed to replace the emissions reductions lost when ending the VET program of 0.05 tons per summer day of VOC.

- 45. (a) Comment:** The Brent Spence Bridge is the most significant factor in motor vehicle pollution generation. There will be no augmentation of this bridge until 2012 therefore pollution will increase.

John R. Schmidt, NCAD.NET Corporation

(b) Response: The Cabinet acknowledges this comment and remains committed to working with the Kentucky Transportation Cabinet and the Ohio-Kentucky-Indiana Regional Planning Authority in the development of transportation plans that address these issues.

- 46. (a) Comment:** Currently, across the 3-county Northern Kentucky area, there is an average of only one location per pollutant measured. It is therefore likely that we under-estimate current pollution magnitude.

John R. Schmidt, NCAD.NET Corporation

(b) Response: The Cabinet does not agree. The Division for Air Quality operates ozone monitors in each county. Monitoring results are typically representative of an area of up to 50 kilometers (approximately 31 miles). Currently Boone County has monitor for Ozone, Campbell County has monitors for PM_{2.5}, PM₁₀, SO₂, NO₂, and Ozone, and Kenton County has monitors for PM_{2.5} and Ozone. The U.S. Environmental Protection Agency (U.S. EPA) has regulations (40 CFR Part 58) that require each state to operate a network of monitoring stations designated as State and Local air Monitoring Stations (SLAMS) that measure ambient concentrations of air pollutants for which standards have been established. This network must conform to specific siting and monitoring criteria. All monitors in the Northern Kentucky area meet the requirements of the SLAMS network.

- 47. (a) Comment:** Why don't we consider exempting new car testing for the first 3 years?

John R. Schmidt, NCAD.NET Corporation

(b) Response: Senate Joint Resolution 3 (SJR3) directs the Cabinet to submit a revision of the State Implementation Plan for the 1-Hour Ozone standard that would remove the vehicle emissions testing program. SJR3 does not have provisions for the modification of the VET program.

48. (a) Comment: While tailpipe testing may be the only option for vehicles prior to model year 1996, OBD represents a more effective test as the years unfold and older cars are retired.
John R. Schmidt, NCAD.NET Corporation

(b) Response: The Cabinet acknowledges this comment. However, Senate Joint Resolution 3 directs the Cabinet to submit a revision of the State Implementation Plan for the 1-Hour Ozone standard that would remove the vehicle emissions testing program.

49. (a) Comment: Driving an inefficient combustion engine not only poisons our air but also wastes money. The current VET price of \$20 is a small fee to periodically check your vehicle and your mechanic to assure optimal fuel economy and minimal pollution.
John R. Schmidt, NCAD.NET Corporation

(b) Response: The Cabinet acknowledges this comment.

50. (a) Comment: Implementation of the revision imposes a costly stress on a few business people in a short period of time likely costing jobs. The reductions and improvements to the VET should be implemented over a seven-year period offsetting the increase expected from the bottleneck of the bridge.
John R. Schmidt, NCAD.NET Corporation

(b) Response: The Cabinet does not agree. This proposed SIP revision requires businesses subject to this regulation to use high transfer efficiency application techniques that will reduce their material consumption by as much as 60%, allowing them the ability to recoup the cost of the equipment. Senate Joint Resolution 3 does not allow for a phased-in approach to remove the VET program.

51. (a) Comment: Northern Kentucky has not yet demonstrated attainment of the new 8-Hour Ozone Standard; until we do, we should not jeopardize our current, hard-fought 1-Hour attainment status.
John R. Schmidt, NCAD.NET Corporation

(b) Response: The Cabinet does not agree. The 1-Hour attainment status is not jeopardized with the removal of the VET program because the SIP revision provides for compensating emissions reductions that are equal to the emission reductions lost with the removal of the VET program.

52. (a) Comment: Another transition regarding U.S. EPA Air Quality assessment in Northern Kentucky involves new measures of Particulate Matter.
John R. Schmidt, NCAD.NET Corporation

(b) Response: The Cabinet acknowledges this comment. This revision addresses only the 1-Hour Ozone Maintenance Plan portion of the SIP. EPA has concluded that preservation of the status quo air quality during the time new attainment demonstrations are being prepared will prevent interference with the states' obligations to develop timely attainment demonstrations with any applicable air quality standard or requirement of the Clean Air Act.

- 53. (a) Comment:** In the 2004 December publication of the Journal of the American Medical Association, a study has directly linked small increases in pollution with corresponding increases in disease and death.

John R. Schmidt, NCAD.NET Corporation

(b) Response: The Cabinet acknowledges this comment.

- 54. (a) Comment:** I support the emissions testing program. It's not a perfect program, but that doesn't mean you should throw it out.

Sherry Carran

(b)Response: The Cabinet acknowledges this comment.

- 55. (a) Comment:** Isn't it about time that we went after the diesel trucks that sit there and pour pollutants into the air all night long and by the hours in the daytime in the hot summer time, and start citing the cars that sit in the shopping centers with their air conditioners running for half an hour while they go in and shop at Wal-Mart's?

Robert Morris

(b)Response: The Cabinet acknowledges this comment. Within the next two years there will be in place a national requirement for the sale and use of low sulfur diesel fuel and emissions limitations on diesel engines themselves. This is anticipated to substantially lower the amount of pollutants that are emitted by heavy-duty diesel vehicles. The remainder of the comment appears to be outside of the scope of this public hearing.

- 56. (a) Comment:** I believe it's unfair for Northern Kentucky to suffer on this thing. We already have to use that formulated gas that's supposed to help clean the air. And as far as the Brent Spence Bridge goes, there's traffic from all over the United States going across there traveling, and I believe it's unfair for the residents of Northern Kentucky to have to go through this.

Bill Botkin

(b) Response: The Cabinet acknowledges this comment. Northern Kentucky was required to have a vehicle emissions testing program because the Clean Air Act required this type of program for any area that was classified as moderate nonattainment for the 1-Hour Ozone standard.

- 57. (a) Comment:** VETO the VET has provided you with various facts, current data, current studies being done by prestigious, well-known and respected persons, universities, etc. proving without a shadow of a doubt that the current vehicle emissions testing program is a useless, government program for greed that has been foisted on the general unknowledgeable public.

Sheila Merrell, VETO the VET

(b)Response: The Cabinet acknowledges this comment, however it is outside of the scope of the proposed SIP revision.

58. (a) Comment: Please do not tell us we will lose our federal funds for highway maintenance as this has now been proven untrue in many other states for some years.
Sheila Merrell, VETO the VET

(b)Response: The Cabinet acknowledges this comment, however it is outside of the scope of the proposed SIP revision.

59. (a) Comment: It is my sincere hope that the people in both the State and Federal government positions take seriously the issues regarding VET testing and do everything possible to abandon this inefficient, burdensome, and unproductive program.
John Riley, Stop the VET

(b)Response: The Cabinet acknowledges this comment.

60. (a) Comment: It appears that there is strong evidence that the use of reformulated fuel is hindering the clean air goals as well and at a cost to the citizens that is high and unnecessary.
John Riley, Stop the VET

(b)Response: The Cabinet acknowledges this comment, however it is outside of the scope of the proposed SIP revision.

61. (a) Comment: Several other states, and most notable is the State of California, have researched this issue and have requested waivers on the use of oxygenated fuels because of the high cost and the negative effect it has on air quality.
John Riley, Stop the VET

(b)Response: The Cabinet acknowledges this comment, however it is outside of the scope of the proposed SIP revision.

62. (a) Comment: We believe that the marketplace has responded to the 1990 Clean Air Act by providing a durable emission system that allows 99 percent of the cars built since 1994 to pass the current test. The marketplaces, not cookie-cutter approaches from the EPA, are going to continue our future improvements.
Larry Brown, Veto the VET

(b)Response: The Cabinet acknowledges this comment.

63. (a) Comment: We are likely to be declared in noncompliance here shortly with the new standards. We are proposing under this particular revised SIP, under the 1-Hour standard, but we are about to come under the new 8-Hour standards and many more counties in this state are going to be considered noncompliant. We believe that they're going to come after small businesses, regardless, in the next five years.
Larry Brown, Veto the VET

(b)Response: The Cabinet acknowledges this comment, and does not concur. The counties of Boone, Campbell, and Kenton are currently designated nonattainment for the 8-hour

standard, and have been so since June 15, 2004. On January 5, 2005, U.S. EPA proposed to designate these three counties nonattainment for the PM_{2.5} standard, effective April 5, 2005. Further, at this current time it is unknown what control strategies might be required to meet the 8-Hour Standard; therefore the belief that small businesses will be impacted is speculative.

- 64. (a) Comment:** The Air Division has identified less than 100 potential users of the High Volume/Low Pressure or HVLP sprayers in the three counties of Boone, Kenton, and Campbell county. The estimated cost of these sprayers is as low as \$50 to less than \$500. Furthermore, it's believed that these sprayers will use substantially less paint and waste than the sprayers being replaced. This means that the users will recoup their expenses from reduced paint costs.

Larry Brown, Veto the VET

(b)Response: The Cabinet acknowledges this comment.

- 65. (a) Comment:** I believe these regulations to be fair and substantially less harmful to the local economy. Using a simple one and a half down trickle effect to the economy, you can safely estimate that the economic loss to Northern Kentucky is over six and a half million dollars per year. The initial cost for the HPLV users is estimated at \$270 per operator, coupled with the same economic effects of one and a half times, the cost to the economy is \$30,000. From an economic standpoint we are looking at a one time cost of \$30,000 versus six and a half million dollars annually to our local economy. The choices are cleaning up VOC's using HVLP sprayers that affect 75 local businesses, versus 90,000 tax paying citizens annually, versus a one cost to a local economy of 30,000 versus six and a half million.

Larry Brown, Veto the VET

(b)Response: The Cabinet acknowledges this comment; however, we have no way of verifying the data used in the comment.

- 66. (a) Comment:** The VET program has been disqualified. The computer modeling has been discredited by the National Academy of Sciences report in 1999, and that basically they're not removing anything using the Vehicle Emissions Testing.

Larry Brown, Veto the VET

(b)Response: The Cabinet does not agree. The report the commenter mentions states that the version of the mobile model (MOBILE 5), that U.S. EPA utilized to calculate mobile emissions at the time the report was written, overestimates the emissions benefits from I/M programs. U.S. EPA does not use that version of the mobile model. It now requires the use of MOBILE 6.2. The report also states that this newer version of the mobile model is expected to address this overstatement of emissions benefits.

67. (a) Comment: The term "properly trained" should be defined. A commenter suggests that the term "properly trained" should include a review of EPA's training material at CCAR-GreenLink® Virtual Shop, <http://www.ccar-greenlink.org/cshops/training.html>.
Larry Brown, Veto the Vet

(b)Response: The cabinet concurs in part. The cabinet does not intend to require applicable facilities to review the suggested on-line training material. However, Section 3(2) will be amended to require equipment operators to be properly trained and operate the equipment in accordance with the manufacturer's specifications.

68. (a) Comment: The regulation requires cloth, paper, or absorbent material to be kept in nonabsorbent, non-leaking containers and kept closed. Can these items be allowed to safely dry with the car or the item that was just painted or coated? "It would appear that no additional VOC would be escaping in the air. To follow the regulation, the cloth or paper would or could maintain the VOC moisture indefinitely or require a special disposing method that may put the HVLP user at risk for fire."
Larry Brown, Veto the Vet

(b)Response: The cabinet does not concur. If the absorbent material is not contained in a non-leaking container and allowed to dry with the coated item, additional VOC will be emitted through the process of evaporation. The requirement of keeping cloth, paper, or absorbent material in a closed, non-leaking container is in accordance with NFPA 30A, *Code for Motor Fuel Dispensing Facilities and Repair Garages*. The user will not be at risk for fire if the container is kept away from an incendiary device or heat source. If oily rags are piled and are not in an airtight container, the pile may possibly spontaneously combust in the presence of oxygen.

69. (a) Comment: We think that it's time that Vehicle Emissions Testing be ended in Northern Kentucky.
Larry Brown, Veto the VET

(b)Response: The Cabinet acknowledges this comment.

70. (a) Comment: I'm here on behalf of Addia K. Wuchner, my name is Jim Newman. Referencing a letter sent to the Director of Air Quality by Addia Wuchner, we want to restate our support for the State Implementation Revision Number 4, which would eliminate the Vehicle Emission Testing program in Boone, Kenton, and Campbell County, respectively.
Jim Newman, on behalf of Addia K. Wuchner

(b)Response: The Cabinet acknowledges this comment.

71. (a) Comment: I want to support the removal of the emissions program in the county. I do not think it is a fair program. I think a lot of people in the county dodge the program by switching their vehicles to other counties that do not use the program. I own an older vehicle and it never passes, and every year I get a waiver. I think it's a waste of money, and I don't think that we're making any improvements. I think we're putting more emissions out by having people go to take the test than we are to removing them. I'd just like to have that program removed, please.

Michael Lee

(b)Response: The Cabinet acknowledges this comment.

72. (a) Comment: Is anybody going to give consideration to the two-cycle engines out there and motorcycles, lawnmowers, weed eaters and all that, the pollution they're emitting, it's outrageous.

Michael Lee

(b)Response: The Cabinet acknowledges this comment, however it is outside of the scope of the proposed SIP revision.

73. (a) Comment: We are just across from Cincinnati, which is a major metropolitan area. Mass amounts of vehicles naturally will cause higher emissions in Northern Kentucky, its filtering right across the river.

Michael Lee

(b)Response: The Cabinet acknowledges this comment, however is outside of the scope of the proposed SIP revision.

74. (a) Comment: I don't think they plan construction programs in such a way that commuters can take alternative routes. Any way you go, you run into a massive traffic jam, which naturally is going to put more pollution into the air.

Michael Lee

(b)Response: The Cabinet acknowledges this comment, however it is outside of the scope of the proposed SIP revision.

75. (a) Comment: No consideration has been given to reformulated fuel. Once that gets into the water table, you cannot get that out of the water table. There are a lot of pollutions going on here and programs like the VET that you are implementing without a lot of study behind them are not necessary.

Michael Lee

(b)Response: The Cabinet acknowledges this comment, however it is outside of the scope of the proposed SIP revision.

76. (a) Comment: The owners and managers of the Ft. Mitchell Garage believe that the Vehicle Emissions Testing program is working. Many of our customers bring the cars to us to be

prepared for testing, so they don't go down and fail, and we bring the cars up to standards and then we take the car in, make sure it passes and give the pass certificate with the bill for whatever the repairs were to the customer. So the car never shows up as a failed vehicle. We are sure that if the Vehicle Emission Testing is discontinued, owners will have no incentive to have their vehicles inspected. Meanwhile, the burden of keeping our clean air falls on disproportionately a small number of businesses who are involved in refinish operations. We are not against regulating the refinish facilities, as we are in favor of reducing pollution in all forms. Why stop a program that is working.
Ron Stamm, Ft. Mitchell Garage

(b)Response: The Cabinet acknowledges this comment, however the language in Senate Joint Resolution 3 required this agency to submit a SIP revision to remove the VET program.

77. (a) Comment: We're here tonight to express our support and removal of the VET testing with the caveat that as long as the EPA does sign off on this as an equitable tradeoff and will not have any adverse effect on any federal highway or transportation funds that may be due to the region.

Shawn Cox, Community Development Director for Unincorporated Boone County

(b)Response: The Cabinet acknowledges this comment.

78. (a) Comment: Although the Northern Kentucky area has always been attainment for the carbon monoxide (CO) national ambient air quality standard (NAAQS), a demonstration of noninterference with the CO standard must be included.

Kay T. Prince, U.S. EPA Region 4

(b)Response: The Cabinet concurs. The emissions inventory information in the revision will be changed to reflect the data for CO and will demonstrate noninterference with the CO NAAQS.

79. (a) Comment: In the cover letter for the final SIP revision, please state that the November 12, 2004 proposed revision replaces the July 16, 2004, submittal, and that Kentucky is requesting the July submittal to be withdrawn.

Kay T. Prince, U.S. EPA Region 4

(b)Response: The Cabinet concurs.

80. (a) Comment: Please request in the final submittal what is the specific regulation to be moved from the active SIP to the contingency measures list of the 1-hour ozone maintenance plan.

Kay T. Prince, U.S. EPA Region 4

(b)Response: The Cabinet will specify in the final submittal that regulation 401 KAR 65:010, Vehicle emission control programs, will be repealed and the vehicle testing program moved to the contingency measures portion of the maintenance plan.

- 81. (a) Comment:** On pages 2 and 8, the effective date to end the VET program is specified as December 31, 2004. However, the cover letter states the effective date to end the VET program is March 31, 2005. Please update the final submittal with the correct effective date.

Kay T. Prince, U.S. EPA Region 4

- (b)Response:** The Cabinet concurs. The final submittal will contain an effective date to end the VET program of March 31, 2005.

- 82. (a) Comment:** For completeness, we recommend that a line be added to the VOC and NOx emission projection tables to account for the available safety margin within the maintenance emissions budget, particularly for the year 2010.

Kay T. Prince, U.S. EPA Region 4

- (b)Response:** The Cabinet acknowledges this comment. As in previous submittals, the emissions analysis tables documented when a safety margin existed and is inherent in the documentation. A separate statement is not required in this SIP revision.

- 83. (a) Comment:** In Appendices B and E, the line items referencing the "NOx/VOC ratio" for the years 2005, 2008, and 2010, and the last sentence of footnote **** of Appendix E are unclear. Kentucky's methodology is correct for calculating the equivalent amount of VOC to substitute for the NOx emissions increase anticipated from the closure of the VET program. However, the "NOx/VOC ratio" references in appendices B and E either need to be clarified or removed. Since the numbers labeled as the ratio are not used in the calculation of equivalent VOC reductions, we suggest deleting these ratio references from the submittal to avoid confusion. The formula in Appendix B correctly provides the equivalent VOC reductions by incorporating the NOx/VOC ratio calculation into the formula.

Kay T. Prince, U.S. EPA Region 4

- (b)Response:** The Cabinet acknowledges this comment. Clarification has been added to the appendices.

- 84. (a) Comment:** The definition of "high volume, low pressure (HVLP) sprayer" should clarify that the maximum pressure is air pressure is not fluid pressure.

Kay T. Prince, U.S. EPA Region 4

- (b)Response:** The cabinet concurs. Section 1(2) has been amended accordingly.

- 85. (a) Comment:** Please consider adding "airless spray" to Section 3(1).

Kay T. Prince, U.S. EPA Region 4

- (b)Response:** The cabinet concurs. "Airless spray" has been included in Section 3(1).

86. (a) Comment: Section 3(1)(j) does not include a public participation process for determining whether other coating application methods achieve emission reductions equivalent to high volume, low pressure or electrostatic spray application methods.
Kay T. Prince, U.S. EPA Region 4

(b)Response: The cabinet concurs. Section 3(1)(j) has been amended accordingly.